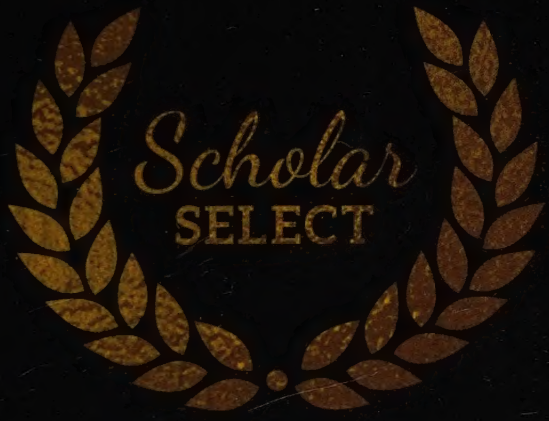
The Survey of Western Palestine-Jerusalem



CHARLES WARREN, PALESTINE EXPLORATION FUND, C R. 1848-1910 CONDER

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The Survey of Western Palestine-Jerusalem

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THE SURVEY

OF

WESTERN PALESTINE.

JERUSALEM.

BY

COL. SIR CHARLES WARREN, K.C.M.G., R.E.,

AND

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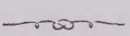
PREFACE.



This volume contains a complete account of our researches in Jerusalem, in the years 1867-1870, with other discoveries by Colonel Sir Charles Wilson, R E, in 1865, and by Captain Conder, M. Clermont Ganneau, Dr. Chaplin, Hon. Conrad Schick, Herr Guthe, and others, since my departure from Jerusalem The volume is accompanied by a portfolio of drawings, plans, etc, to which reference is made in the text

CHARLES WARREN.

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JERUSALEM.

CHRONOLOGICAL SYNOPSIS OF THE HISTORY OF JERUSALEM

		B C
Jerusalem taken by David (1st siege)	*circa*	1044
First Temple founded by Solomon	„	1007
Shishak takes Jerusalem (2nd siege)	„	886
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Uzziah builds towers	„	770
Jotham builds Ophel wall	„	740
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Sennacherib besieges Hezekiah (5th siege)	„	702
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Jonathan builds a new wall		143
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	B C
Crassus visits Jerusalem	55
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Herod's Temple commenced	19
" " completed	11
Golden Eagle in Temple cut down	4
	A D
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Titus takes Jerusalem (15th siege)	70
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" " is expelled	135
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Omar takes Jerusalem (18th siege)	637
Abd el Melek builds Kubbet es Sakhrah	688
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Charlemagne builds a hospice	*circa* 800
Patriarch Thomas enlarges the Holy Sepulchre dome	" 830
The Khalif el Mamun restores Dome of the Rock	831
Khalif Moez takes possession of the city	969
Hakem destroys Holy Sepulchre Church	1010
Nicephorus completes its restoration	1016
Pilgrimages become numerous	1033
Robert of Normandy's pilgrimage	1035
Turkomans expel Egyptians from the city	1094
The Egyptians retake Jerusalem	1098
Crusaders take Jerusalem (19th siege)	1099
Cathedral of Holy Sepulchre commenced	1103
The Hospital of St John rebuilt	1130
Templum Domini alterations complete	1136
Walls of Jerusalem repaired	1178
Saladin takes Jerusalem (20th siege)	1187

	A D
Saladin repairs the walls of the city	1192
Melek el Muazzam dismantles the walls	1219
Frederic II rebuilds the walls	1229
Daud, Emîr of Kerak, destroys the walls	1239
Christians obtain Jerusalem by treaty	1243
Kharezmians destroy tombs of Latin Kings	1244
Kharezmians defeated by Egyptians	1247
SELIM I TAKES SYRIA	1517
Soliman the Magnificent builds walls	1542
Holy Sepulchre Church burnt	1808
Muhammed Aly takes Jerusalem (no siege)	1832
The Fellahin seize Jerusalem	1834
Syria and Jerusalem restored to Turkey	1840
Protestant Bishopric established	1842
Disputes as to the Sepulchre	1850
Ordnance Survey executed	1864
Warren's excavations	1867–1870

THE SIEGE OF JERUSALEM BY TITUS, 70 A.D.

EPITOME OF JOSEPHUS'S ACCOUNT

11th Ab	Titus levels the ground north of the city (5 Wars ii. 5, iii. 2, xiii. 7).
14th Ab	PASSOVER. John seizes the Temple
23rd Ab	First day of siege (5 Wars vii. 2)
24th Ab	Banks against outer walls of city complete
7th Zif	Wall of Agrippa taken (5 Wars vii. 2)
	15th day of siege according to Josephus
12th Zif	Second wall taken (5 Wars viii. 1)
15th Zif	Second wall taken again (5 Wars ix. 2)
20th Zif	Banks against Antonia and upper city (5 Wars ix. 2)
29th Zif	Banks completed (5 Wars xi. 4)
1st Sivan	Antonia bank mined (5 Wars xi. 4)
3rd Sivan	Bank against upper city destroyed (5 Wars xi. 5)
5th Sivan	Wall of circumvallation commenced
29th Sivan	New banks completed (5 Wars xii. 4, 6 Wars i. 1)
1st Tammuz	Wall of Antonia falls (6 Wars i. 3)
3rd Tammuz	Death of Sabinus (6 Wars i. 6).
4th Tammuz	Antonia surprised by night (6 Wars i. 7)
17th Tammuz	Daily sacrifice ceases (6 Wars ii. 1, Taanith iv. 4)
20th Tammuz	Four new banks in Temple
22nd Tammuz	Cloisters fired (6 Wars ii. 9)
24th Tammuz	Other cloisters burned
27th Tammuz.	West cloister burned (6 Wars iii. 1)
28th Tammuz	North cloister burned
8th Ab	Temple wall battered (6 Wars iv. 1)
9th Ab	Temple gate fired (6 Wars iv. 5), FAST (Taanith iv. 7)
10th Ab	Temple fired (6 Wars vi. 3)
20th Ab	Banks against upper city (6 Wars viii. 1)
7th Elul	Banks completed (6 Wars viii. 4)
8th Elul	Conquest of upper city (134th day of siege)

N.B.—The abstract given by Canon Williams contains the curious error of supposing the Jewish year to be solar, and is therefore incorrect

ARCHITECTURAL HISTORY OF JERUSALEM.

THE present paper is confined to the consideration of the dates of existing buildings in the city of Jerusalem so far as they can be determined.

The oldest existing remains appear to be those of the ramparts of the upper city. It was round this hill (now known to the inhabitants as Sion) that the wall of David and Solomon ran, according to Josephus (5 Wars iv. 2). It appears therefore possible that the great scarps in the present British cemetery (described under the head Hŭmmâm Tubariya) may be as old as the time of David (the eleventh century B.C.), or even earlier.

The ancient tomb now known as that of Nicodemus, west of the rotunda of the Holy Sepulchre Church, has been proposed by Captain Conder as representing the burial-place of Solomon, David, and the more famous of the succeeding Kings of Judah, which was to be found in the 'City of David.' Captain Conder agrees with Sir Charles Warren in applying this term to the Lower City, and if the suggestion be accepted, this tomb is one of the oldest monuments in Jerusalem. We learn from the Talmud (Tosiphta Baba Bathra, c. 1) that the Tombs of the Kings were, with the sepulchre of Huldah, the only tombs inside Jerusalem, and the so-called Tomb of Nicodemus is the only ancient tomb inside modern Jerusalem, so far as has been discovered. There is no doubt that its form is that of the oldest class of Jewish tombs, and the fact that some of the *kokîm* are sunk beneath the floor of the chamber seems to agree with Josephus' description of the Tombs of David and Solomon (7 Ant. xv. 3), which were invisible even when standing within the monument. It must, however, be noted that other writers have supposed all the Kings of Judah to have been buried on the Ophel spur south of the Temple.

The great tunnel from the upper spring to the Pool of Siloam is a third monument of Jerusalem which certainly dates earlier than the Captivity The inscription recently discovered in this rock-cut aqueduct is supposed to date as early as the eighth century B C, and it appears probable that this great work is referred to in the Bible in the account of Hezekiah's preparations for the Assyrian siege (2 Chron xxxii 4, 30), in which it is stated that the waters of the spring of Gihon were artificially diverted

The great wall discovered by Sir Charles Warren on Ophel is another relic which appears to date at least as early as the time of Nehemiah Nearly all authorities agree that the Wall of Nehemiah occupied this position, and that it appears to have been built on the older line of Jotham and Manasseh (2 Chron xxvii 3, xxxiii 14)

The rocky scarp of the Tower of Baris, with its exterior fosse, appears to have existed at least as early as the second century B C (18 Ant xiv 3), and is not impossibly mentioned in the Bible (Neh. ii. 8, iii. 1, Zech. xiv. 10, cf 1 Wars iii 3, Middoth i 9, Tamid i 1, Zebakhim xii 3) Sir Charles Warren agrees with Sir Charles Wilson in fixing this on the scarp now existing at the north-west angle of the Haram Captain Conder follows them in this identification, and the same views were held by the Duc de Vogué, and yet earlier by Dr Robinson

The so-called Cotton Grotto, near the Damascus Gate, is a great quarry whence the Temple stones were obtained It may have been used by Solomon, and was clearly in existence in the time of Herod It is perhaps to this grotto that Josephus alludes in speaking of the 'Royal Caverns' (5 Wars iv. 2) on the north side of the city

The architectural character of the old rock-cut monuments in the Kedron valley, opposite to the Haram, has led architectural authorities to regard these sepulchres as belonging probably to the Hasmonean period – the second century B C Josephus speaks of a monument of Alexander (Jannæus) on the east of the city (5 Wars vii. 3), in a situation possibly represented by that of the Tantûr Fer'ôn, or so-called Absalom's Pillar, which may thus perhaps be identified with the sepulchre of the Hasmonean monarch, Alexander Jannæus Two other tombs in immediate proximity are traditionally named after St James and Zechariah, but on the façade of the first there is a rude inscription in square Hebrew, which mentions the family of the Bene Hezir as there buried This family of priests is

mentioned in the Bible (1 Chron xxiv 15), and the date of the inscription (which is in so inaccessible a position as to have been very probably cut before the façade was completed) is held by the Duc de Vogué to be determined by the form of the characters as belonging to the century before Christ

Another monument further south is often mentioned by De Vogué and others as the 'Egyptian Tomb' on account of its mouldings, but these mouldings are repeated on the so-called tombs of Absalom and Zechariah just noticed, and the remains of two letters, apparently of the earlier Hebrew character, have recently been observed on this tomb by M Clermont Ganneau, which might serve to class this monument as even earlier than those already noticed

North of Jerusalem is the fine monument called generally the 'Tombs of the Kings' Dr. Robinson has given reasons for supposing that this is the sepulchre of Helena, Queen of Adiabene, and of her sons This monument was surmounted by three pyramids (20 Ant iv 3), like that on the tomb of Zechariah Pausanias notices the rolling stone at the door (Grecia Descript 8, 16), and later writers also mention the monument (Euseb Hist. Eccles ii 12, Jerome, Epit Paulæ, etc., etc , cf. 'Biblical Researches,' 1, pp 363 and 610) The so-called 'Tombs of the Kings' are still closed by a rolling stone, and parts of the surmounting pyramids have been discovered in excavating above the façade This monument may therefore be regarded as belonging to the century before the Christian Era. A fine sarcophagus with an Aramaic inscription, stating that it held the body of Queen Sara, was discovered in this tomb by De Saulcy

The so-called 'Tombs of the Judges,' north-west of the preceding, are held by the Jews to be those of the chiefs of the Sanhedrin; and this tradition agrees with the architectural style of the façade in determining this system of sepulchres as belonging to the same period with the preceding—viz the Hasmonean age

A tomb of similar character exists on the south side of Wâdy Rabâbeh, having a frieze ornamented with rosettes and triglyphs This monument appears to agree in position with the sepulchre of Ananus (5 Wars xii 2), the famous high priest who lived about the time of Christ The tomb of Simon the Just (fourth century B C) is shown by the Jews north of the city, but there is no evidence beyond tradition of its identity

The great drafted masonry of the Haram walls is all of one class to the foundation (with differences of finish according to position), and it is referred by the Duc de Vogué entirely to the Herodian period. The discovery of Phœnician letters at the base of the wall near the south-east angle does not of necessity prove that this rampart was erected by Solomon, as the character was also in use in Herod's time. Captain Conder has followed De Vogué in supposing the present ramparts to have been erected from their foundation by Herod. This question is, however, further discussed in detail on a later page.

The great reservoir, now known as Hŭmmâm el Batrak or Hezekiah's Pool, is supposed by many authorities to be the pool Amygdalon (or 'of the towers') mentioned by Josephus (5 Wars xi. 4), apparently near Hippicus. In this case the pool is at least as old as the Herodian period.

The low-level aqueduct from Bethlehem was constructed by Pontius Pilate (18 Ant. iii. 2), and this is the last of the existing remains in and round the city which can be assigned to the period preceding the great destruction by Titus in 70 A.D. For although it is agreed by nearly all authorities that the present 'Tower of David' stands on the site of one of the old Royal Towers (representing Phasaelus according to Lewin, De Vogué, Conder, and others, or Hippicus according to Robinson and earlier authorities), the existing masonry is in part more modern. The great Tyropœon Bridge, which existed already before Pompey's siege (63 B.C.), may be considered as part of the Haram, and the arch, now represented by a few haunch stones, is of the Herodian age. The date of the aqueduct leading into the Haram from outside the Damascus Gate is uncertain, but it has been thought to represent the narrow passage called Strato's by Josephus (13 Ant. xi. 2), and in this case the excavation is at least as old as the Hasmonean age.

The remaining monuments of ancient Jerusalem, of which no traces have as yet been recognised with certainty, include the famous second wall, commenced by Solomon, to include the lower city, and the third wall, built about 40 A.D. by Agrippa, yet further north. The various theories concerning these fortifications will be mentioned later.

The tomb of John Hyrcanus, near the pool Amygdalon, is also unknown, and the sites of the towers of Psephinus and Mariamne remain

doubtful The Monument of the Fuller, the Women's Towers, the pool Struthius, are also subjects of controversy, as is the exact position of the Holy House within the Haram area, and the extent of the Temple enclosure, with the position of its gates. Of natural features, the Dragon's Well and the Serpent's Pool (with the adjoining monument of Herod) are the most important remaining to be fixed, while the site of Calvary, traditionally placed within the Church of the Holy Sepulchre, has been supposed by Captain Conder to be recognisable in the present cliff of Jeremiah's Grotto

The first builder whose work can be recognised after the great destruction by Titus is the Emperor Hadrian, who rebuilt Jerusalem under the new name Ælia Capitolina in 136 A D. The walls erected by this Emperor seem probably to have followed a line closely represented by that of the present city wall, excluding great part of the high south-west hill now called Sion. This line on the south was clearly so traced when the Bordeaux Pilgrim visited Jerusalem in 333 A D, when Hadrian's walls were apparently still standing.

Hadrian erected a statue of Jupiter (still in position when seen by the Bordeaux Pilgrim) on the site of the Temple (Jerome, Comm. on Isaiah ii 8 and on Matt xxiv. 15), and the inscription which was cut on its base is still recognisable on a large stone built upside down into the south wall of the Haram near the Double Gate According to Eusebius (Vita Const iii. 26) and Jerome (Epit xlix), Hadrian also built a Temple of Venus on the site of the present Church of the Holy Sepulchre, but of this no remains have been recognised A coin of Antoninus Pius represents such a temple as existing in Jerusalem. Among the other public buildings of this period were two markets, a theatre, a mint, a tricameron, a tetranymphon, and a dodekapylon ('Paschal Chronicle'), but none of these have been recognised. It is, however, supposed on architectural grounds that the so-called Ecce Homo arch was a triumphal entry (similar to that at Jerâsh, beyond Jordan) erected by Hadrian, or by one of his immediate successors, in the second century A D.

The attempt of the Emperor Julian to rebuild the Jerusalem Temple in the fourth century failed entirely, in 333 A D the enclosure was found still in ruins by the Bordeaux Pilgrim According to Eusebius,

it would appear that a church already existed on Olivet when Helena visited the city in 326 A.D. According to Epiphanius, seven synagogues were found by Hadrian on Sion, one of which still existed in the fourth century, according to the Bordeaux Pilgrim. Epiphanius also speaks of the Sion Church (the later Cœnaculum) as existing in the time of Hadrian. A cemetery of tombs in the Wâdy Rabâbeh belonging to this church will be found described in a later page under the name of that valley.

It is possible that the great pool called Birket Isrâîl was constructed at the time of the restoration of Jerusalem by Hadrian, for, although Sir Charles Warren has shown that some kind of fosse must here have existed at a very early period, there is no description of this pool in the works of Josephus, and it is very improbable that he would have omitted to mention so enormous a reservoir had it existed in his time. He speaks only of a fosse, and the masonry of the birket is inferior in character, and resembles the later Roman work in Syria. This reservoir appears to be mentioned by the Bordeaux Pilgrim (section 4) as already existing, and would therefore most naturally be referable to Hadrian.

With the conversion of Constantine a new building epoch commences in Jerusalem. The original Basilica of the Anastasis was completed by Constantine in the year 335 A.D. The situation of the traditional site is described by Theodorus (530 A.D.) as being in the middle of the city. Eucherius (427—40 A.D.) places it north of Sion, and the site of Sion at this time was identical with that now shown—the hill of the old upper city. The Bordeaux Pilgrim (333 A.D.) speaks of the Basilica, which was then building, as on the left hand of a pilgrim proceeding to the Porta Neapolitana, which is generally supposed to have been the present Damascus Gate. Eusebius and Jerome (in the 'Onomasticon') also place Golgotha north of Sion. These various notices appear to indicate that Constantine's Basilica occupied the same site now shown as that of the Holy Sepulchre, close to the hill of Calvary. The view of Mr. Fergusson will, however, be mentioned later. The Duc de Vogué and Professor Willis agree in restoring the Basilica on the present site in such a manner as to make the walls and colonnade still existing east of the present church parts of the atrium and propylea, which are described by

Eusebius (Vita Constant iii. 39) as existing east of the Basilica and of the Sepulchre

This Basilica is described by various writers of the fourth, fifth and sixth centuries, and often mentioned in the Homilies of St Cyril It was destroyed in 614 A D by Chosroes II, a Sassanian King of Persia, as mentioned by the contemporary writer of the 'Paschal Chronicle.'

Other buildings existing in the fourth, fifth, and sixth centuries are as follows The Church or Basilica of the Ascension, on the summit of Olivet, was already in existence in 333 A D., but no trace of this original building has been found The Church of the Tomb of the Virgin is mentioned by John of Damascus as existing in the time of the Empress Pulcheria (390—450 A D) and a Basilica is here described by Theodorus (530 A D) Bernard, in 867 A.D., found it in ruins—a round church without any roof A Basilica is described in the south-east angle of the Haram as early as 530 A D., marking the site of the so-called Cradle of Christ Theodorus calls it St Simeon

In the last years of her life the Empress Eudoxia retired to Jerusalem (450—461 A D), and rebuilt the walls of the city. She also erected a Church of St. Stephen, north of the city, of which some traces remain. (Cf under head el Heidhemîyeh) It was a stadium from the city wall (Evagrius Hist Eccles i. 22), and in or near it the Empress was buried A tomb discovered recently in this vicinity has been thought to be possibly that of Eudoxia. The church was found in ruins by Sæwulf in 1102 A.D.

The following sites are also mentioned in the fifth and sixth centuries, before the Moslem conquest, which took place under Omar in 637 A D. St Anne (a church re-erected by the Crusaders) is mentioned by Antony of Piacenza in 600 A D The Church of Gethsemane existed even in the fourth century. St. Pelagia, on Olivet (a church with the tomb of the Saint), is noticed by Theodorus in 530 A D, and probably occupied the site of the present traditional cave of St Pelagia. The same author speaks also of the Church of St Peter on Sion—probably the site afterwards known as Gallicantus. Another Chapel of St. Mark, not now recognisable, seems also to have then stood on Sion

The most important buildings of the early Christian period after the

time of Constantine appear, however, to have been those of Justinian, in the Haram area, erected about 532 A.D. Theodorus was the architect, and the well-known tract describing Jerusalem in the sixth century bears his name. These buildings included the Basilica of St. Mary (cf. 'Procopius de Edificiis Justiniani,' v. 6), which stood on vaults, and was surrounded with cloisters (*stoa*), and also two hospitals for the sick and poor. The remains of this Basilica are recognised by the Duc de Vogüé in the present mosque el Aksa, and it is possible that not only the later ornamentation of the Double Gate, but also the structure of the Golden Gate, and the roofing of many of the Haram cisterns, belong to this period, as well as the vaulting of the Twin Pools, which is similar to that of the tunnel leading to the Double Gate. In the fourth century the Twin Pools were apparently open and uncovered, though now beneath the level of the roadway.

The Basilica of Constantine, burnt in 614 A.D., was replaced in 616 A.D. by a group of small chapels or oratories erected by the Monk Modestus, afterwards Patriarch of Jerusalem. A curious plan exists (cf. De Vogué, 'Églises de la Terre Sainte,' p. 161), made by Arculphus about 680 A.D., showing these chapels, one being on the supposed site of Calvary, a second over the cave of the Invention of the Cross, a third dedicated to St. Mary, west of Calvary, while the Holy Sepulchre itself stood in a rotunda, called the Martyrion. These chapels were destroyed in 1010 A.D. by order of the Fatemite Khalif Hakem. They were again replaced by little chapels (*oratoria valde modica*), which the Crusaders found standing, and which they incorporated in their great Cathedral ('William of Tyre,' viii. 3).

Among the Christian chapels already in existence when the Crusaders entered Jerusalem may be mentioned St. John on Olivet, St. Leon in the valley of Jehosaphat, the Chapels of the Agony and of the Credo on Olivet, and St. Mamilla, apparently near the present Birket Mamilla. The great Hospital of St. John was erected on the old site of Charlemagne's hospice, which is mentioned by Bernhard the Wise in 867 A.D., adjoining a Church of St. Mary (afterwards St. Maria Majora). This building was, however, destroyed in the eleventh century. St. Maria Latina, north of the hospice, was founded by the merchants of Amalfi between 1014 and 1023 A.D., and the firman granted for its re-endowment by the Moslem

ruler, Melek Muzzafer, in 1023 A.D., is still preserved in the Franciscan monastery at Jerusalem Sancta Maria Parva, adjoining this last, was added for female pilgrims, apparently also in the eleventh century (William of Tyre, IX 18), and a hospital and chapel of St John the Almoner adjoined this smaller church All these buildings existed when the first Crusaders entered Jerusalem The cemetery of Aceldama is also mentioned as early as 680 A D., apparently at the present site (Hakk ed Dumm). This site adjoined the mediæval Chaudemar, but is to be distinguished from the Charnel House of the Lion mentioned by Bernard the Wise and John of Wirtzburg, which was on the site of the present cemetery, near Birket Mamilla

The pool of Siloam appears also to have been at one time covered by a building, which is called a church by Antony of Piacenza, about 600 A D , and the tombs in the Jehosaphat Valley were at this time inhabited by Christian hermits

The early pilgrims before 530 A D speak, as we have seen, of the Temple enclosure as in ruins The Bordeaux Pilgrim mentions the vault and tanks, the ramparts and the 'pierced stone,' near which was Hadrian's statue The latter is apparently the present Sakhrah rock, pierced by the shaft leading to the cave beneath. Eucherius (in the fifth century) saw only a few cisterns, and the *pinna,* or pinnacle, which appears to have been formed by the masonry of the south-east angle, standing many courses higher than the rest of the ancient walls.

None of the early writers speak of the Golden Gate before Justinian Antony of Piacenza and Sæwulf in 1102 are the first to describe this monument, and the latter does not carry its real history back further than the time of Heraclius (the beginning of the seventh century) Arculphus, in 680 A D , is the first to speak of the Moslem buildings erected in the Temple Area It appears from Eutychius (tenth century), and from the Arabic writers, Mejr ed Dîn and Jelâl ed Dîn (fifteenth century), that Omar found no building over or near the Sakhrah rock The Khalif erected a wooden building near the Rock, but this was subsequently removed ; it is to this structure that Arculphus appears to allude in describing a rude square house of prayer on the site of the Temple, raised with planks and beams on old foundations, and large enough to hold 3,000 men.

The following are the most important notices of Jerusalem from the fourth to the twelfth centuries

The earliest description is that written by the unknown Pilgrim of Bordeaux, who was in Jerusalem in the year 333, while Constantine's Church was being built

'Sunt in Hierusalem piscinæ magnæ duæ ad latus templi, id est, una ad dexteram, alia ad sinistram, quas Salomon fecit, in tertius vero in civitate sunt piscinæ gemellares, quinque porticus habentes, quæ appellantur Bethsaida Ibi ægri multorum annorum sanabantur, aquam autem habent piscinæ in modum cocci turbatam Est et ibi crypta, ubi Salomon dæmones torquebat Et ibi est angulus turris excelsissimæ, ubi Dominus ascendit, et dixit ei, qui tentabat eum Si filius Dei es, mitte te deorsum Et ait ei Dominus Non tentabis Dominum Deum tuum, sed illi soli servies Ibi est lapis angularis magnus, de quo dictum est Lapidem, quem reprobaverunt ædificantes, hic factus est ad caput anguli Et sub pinna turris ipsius sunt cubicula plurima, ubi Salomon palatium habebat Ibi etiam constat cubiculum in quo sedit et Sapientiam descripsit, ipsum vero cubiculum uno lapide est tectum Sunt ibi et exceptuaria magna aquæ subterranea et piscinæ magno opere ædificatæ Et in æde ipsa, ubi templum fuit, quod Salomon ædificavit, in marmore ante aram sanguinem Zachariæ dicunt hodie fusum, etiam parent vestigia clavorum militum, qui eum occiderunt, per totam aream, ut putes in cera fixum esse Sunt ibi et statuæ duæ Hadriani, et est non longe de statuis lapis pertusus, ad quem veniunt judæi singulis annis, et unguent eum, et lamentant se cum

'There are in Jerusalem two large pools beside the Temple, that is, one to the right,[1] the other to the left,[2] which Solomon made, but within the city are the Twin Pools,[3] having five porches, which are called Bethsaida There those who had been many years sick were healed, for the water of the pools is troubled as if boiling There also is the crypt where Solomon tormented demons[4], and there is the corner of a very high tower[5] where the Lord ascended, and he who tempted Him said, "If Thou be the Son of God, cast Thyself down," and the Lord said to him, "Thou shalt not tempt the Lord thy God, but Him only shalt thou serve" There is the great Stone of the Corner, of which it is said, "The stone which the builders refused is here made the head of the corner" And under the pinnacle of the same tower are very many cells where Solomon had his palace[6] There also stands the cell in which he sat and wrote about Wisdom, and this cell is roofed by a single stone[7] There are also great tanks underground for water, and pools made by great labour And in the enclosure itself, where was the temple which Solomon built, in the marble before the altar, the blood of Zachariah, son of Barachiah, they say, yet flows (dicunt hodie fusum), also the marks appear of the clubs of the soldiers who slew him, all over the court, so that you would think them printed in wax

[1] Cistern near St. Anne [2] Birket Israil
[3] Twin Pools by the barracks, north-west angle of Haram [4] Rock cut passage from last
[5] South-east angle of Haram [6] Vaults at south east angle
[7] Ancient window in east wall at south east angle, roofed, as described, with a single stone, and large enough to be called a cell

gemitu, et vestimenta sua scindunt, et sic recedunt Est ibi et domus Ezechiæ, regis Judæ

'Item exeunti Hierusalem, ut ascendas Sion, in parte sinistra et deorsum in valle, juxta murum, est piscina, quæ dicitur Siloa et habet quadriporticum, et alia piscina grandis foras Hic fons sex diebus atque noctibus currit, septimo vero die, qui est sabbatum, in totum nec nocte, nec die currit

'Inde eadem via ascenditur Sion, et paret, ubi fuit domus Caiphæ sacerdotis, et columna adhuc ibi est, in qua Christum flagellis ceciderunt Intus autem intra murum Sion, paret locus, ubi palatium habuit David Ex septem synagogis, quæ illic fuerant, una tantum remansit, reliquæ autem arantur et seminantur, sicut Isaias propheta dixit.

'Inde ut eas foras murum de Sion, eunti ad portam neapolitanam ad partem dexteram, deorsum in valle sunt parietes, ubi domus fuit sive prætorium Pontii Pilati ubi Dominus auditus est, antequam pateretur A sinistra autem parte est monticulus Golgotha, ubi Dominus crucifixus est Inde quasi ad lapidis missum est crypta, ubi corpus ejus positum fuit, et tertio die surrexit Ibidem modo jussu Constantini imperatoris basilica facta est, id est, dominicum miræ pulchritudinis, habens ad latus exceptoria, unde aqua levatur, et balneum a tergo, ubi infantes lavantur

There are the two statues of Hadrian, and there is not far from the statues a pierced stone (lapis pertusus),[1] to which come the Jews every year and anoint it, and bewail themselves with groans, and tear their garments, and thus depart And there is the house of Hezekiah, King of Judah

'Likewise to one going out of Jerusalem, that you may go up Sion, on the left and down in the valley near the wall is the pool which is called Siloa, and it has four porches, and another great pool outside Here a fountain runs six days and nights, but on the seventh day, which is the Sabbath, it runs not neither the whole day nor the whole night.[2]

'Thence by the same way one goes up Sion, and the place where was the house of Caiphas the priest is seen, and the column is still there on which they scourged Christ with scourges[3] But within, inside the wall of Sion, appears the place where David had his palace[4] Of the seven synagogues which were there, only one remains, for the rest have been ploughed and sown, as the prophet Isaias said

'Thence that you may go out of the wall from Sion (inde ut eas foras murum de Sion) for one going to the Neapolitan Gate,[5] on the right hand, down in the valley are walls, where was the house of prætorium of Pontius Pilate[6], where the Lord was heard before He suffered But on the left hand is the little Mount Golgotha[7], where the Lord was crucified Thence about a stone's-throw is the crypt[8] where His body was placed and rose the third day There now, by order of the Emperor Constantine, a basilica is making, that is a *dominicum* of wonderful beauty, having beside it a tank, whence the water is drawn, and a bath behind, where the infants are washed

[1] The Sakhrah Rock
[2] Siloam, with the old pool beneath, and an intermittent supply, as at present
[3] The present site of Caiaphas House
[4] The so called Tower of David
[5] Damascus Gate
[6] Present barracks, north west angle of Haram
[7] Calvary (Golgotha)
[8] Holy Sepulchre

'Item ab Hierusalem euntí ad portam, quæ est contra orientem, ut ascendatur in montem Oliveti, vallis, quæ dicitur Josaphat Ad partem sinistram, ubi sunt vineæ, est et petra, ubi Judas Iscarioth Christum tradidit, ad partem vero dexteram est arbor palmæ, de qua infantes ramos tulerunt et, veniente Christo substraverunt Inde non longe, quasi ad lapidis missum, sunt monumenta duo, monubiles mirae pulchritudinis, facta in unum positus est Isaias propheta, qui est vere monolithus, et in alium Ezechias, rex judæorum

'Inde ascendis in montem Oliveti, ubi Dominus ante passionem discipulos docuit Ibi facta est jussu Constantini basilica mirae pulchritudinis Inde non longe est monti culus, ubi Dominus ascendit orare, et apparuit illic Moyses et Elias, quando Petrum et Joannem secum duxit.'

'Likewise from Jerusalem, for one going to the gate which is on the east, that he may ascend the Mount of Olives, there is the valley which is called Jehosaphat[1] On the left, where are the vineyards, is also the stone where Judas Iscariot betrayed Christ, but on the right is the palm-tree whence the children plucked branches, and coming to Christ strewed them beneath Thence not far, about a stone's-throw, are two monuments constructed of wondrous beauty, in one is placed Isaias the prophet,[2] which is a true monolith, and in the other Hezekiah, King of the Jews[3]

'Thence you ascend the Mount of Olives, where the Lord taught His disciples before His passion There is made by command of Constantine a basilica of wonderful beauty Thence, not far, is the little mount where the Lord ascended to pray, and Moses and Elias appeared there, when He took with Him Peter and John[4]

Constantine's Basilica is thus described by Eusebius (Professor Willis's translation is followed) in his 'Life of Constantine,' Book III. .

'34 First, the Emperor's magnificence decorated the Sacred Cave itself, as the head of the whole work, with choice columns and great decoration, and ornamented it in every possible manner

'35 He then proceeded to set in order an extensive space open to the sky, which he paved with polished stones, and enclosed on three sides with long cloisters

'36 On that side of the court which was situated opposite the Cave and towards the rising sun was placed the Basilica (βασιλικὸς νεώς), an admirable work, raised to a mighty elevation, and extensive in length and breadth Its interior was lined with many-coloured marbles, and the outer surface of its walls decorated with polished and closely jointed masonry as handsome as marble itself The roof, with its chambers, was covered with lead to protect it from the winter rains The inner roof was decorated with sculptured panels, and extended like a vast sea over the whole Basilica, and being gilt with the purest gold, caused the entire building to shine as if with the rays of light

'37 Moreover, on either side double piers of double porticoes above and below extended the full length of the temple, and their ceilings were gilt Of these porticoes, those in front were sustained by enormous columns those within by square pilasters richly ornamented Three doors towards the rising sun admitted the entering crowd

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[1] Kedron Valley.

[2] Now called Tomb of Zecharias

[3] Now called Absolom's Pillar

[4] [illegible]

'38 Opposite these doors was the apse, the head of the whole work, raised to the very roof of the Basilica. It was surrounded by twelve columns, the number of the Apostles, and they were ornamented with large silver capitals, which the Emperor dedicated to God as a beautiful gift

'39 Hence, going forward to the entrances which were before the temple, he interposed an open space, namely, between the Basilica and the portals, there were also recessed chambers (exedræ) on each side of the first or entrance court, which had cloisters attached to it—and lastly the gates of the court Beyond them, in the very middle of the wide market-place, stood the propylæa, or vestibule, of the whole work, which being decorated in the most imposing manner, afforded to those who were passing a promise of the wonders within This temple did the Emperor construct as a Martyrium of the saving Resurrection'—Eusebius, 'Vita Constantini,' lib iii

The next account of the city which should be quoted is that of Eucherius about 427—440 A D.

'Hierusalem ab Aelio Hadriano Aelia vocitatur. Nam, post subversionem Titi, conditoris Aelii nomen cum opere suscepit Natura loci edita, ajunt, qualibet ex parte haud dubie ascendendum erit, diutino quippe, sed molli tractu assurgit Situs ipse urbis pene in orbem circumactus, non parvo murorum ambitu, quo etiam montem Sion, quondam vicinum, jam intra se recipit, qui, a meridie positus, pro arce urbi supereminet. Major civitatis pars infra montem jacet in planitie humilioris collis posita

'Mons Sion, latere uno, quod aquilonem respicit, clericorum religiosorumque habitationibus frequentatur cujus in vertice planitiem monachorum cellulæ obtinent ecclesiam circumdantes, quæ illic, ut fertur, ab apostolis fundata pro loci resurrectionis dominicæ reverentia ob quod promissum quondam per Dominum paracleto repleti sunt spiritu

'Celebriores tres sunt portarum exitus unus ab occasu, alter ab oriente, tertius a septentrionali parte urbis

'Primum de locis sanctis Pro conditione platearum divertendum est ad basilicam, quæ martyrium appellatur, a Constantino magno cultu exstructa Dehinc cohærer tia ab occasu insunt Golgotha atque anastasis, sed anastasis in loco est resurrectionis, Gol

'Jerusalem is called Ælia after Ælius Hadrianus. For after the destruction by Titus it received the name with the works of its founder, Ælius The nature of the place being, they say, lofty, it must be of necessity ascended to from all sides, because it rises for a long way, although gradually The site of the city itself is almost round, with no small circuit of walls, within which Mount Sion, formerly near, is now included, which rises on the south as the citadel of the town The greater part of the city lies below the mount, placed on the flat of a lower hill

'Mount Sion is occupied on the side looking north (aquilonem) by the dwellings of clerics and religious persons, on the flat summit are cells of monks round a church, which was there founded, as is said, by the Apostles through reverence of the place of the Resurrection of the Lord, because, as promised before by the Lord, they were filled with the Holy Ghost

'The chief gates are three, one on the west, another on the east, and a third on the north side of the city

'First of the holy places By the position of the streets it is necessary to turn towards the Basilica, which is called Martyrium, built with great zeal by Constantine Joining this, on the west, are Golgotha and the Anastasis, the Anastasis on the site of the Resurrection,

gotha vero, medius inter anastasim ac martyrium, locus est dominicæ passionis . in quo, etiam rupes apparet, quæ quondam ipsam affixo Domini corpore, crucem pertulit Atque hæc tum extra montem Sion posita cernuntur, quo se ad aquilonem deficiens loci tumor porrigit.

'Templum vero, in inferiori parte urbis in vicinia muri ab oriente locatum magnificeque constructum, quondam miraculum fuit, ex quo parietis unius in ruinis quædam pinna stat super reliquis ad fundamenta usque destructis - Paucæ illic cisternæ in usum aquarum ostenduntur in ea parte civitatis, quæ ad septentrionem in vicinia templi extenditur

'Bethesda gemino apparet insignis lacu alter hibernis plerumque impletur imbribus, alter rubris est discolor aquis

'Ab ea fronte montis Sion, quæ prærupta rupe orientalem plagam spectat, infra muros atque e radicibus collis fons Siloa prorumpit, qui non semper, sed in certis horis diebusque emanat per antra saxaque decurrens, aquarum accessu in meridiem fluit Juxta murum Jerusalem vel templi ab oriente Geennon occurrit sive vallis Josaphat a septentrione in austrum porrecta, per quam torrens, siquando pluvias aquas recipit, decurrit

'Circumjecta hierosolymitanæ urbis aspere et montosa cernuntur, quæ etiam montem Oliveti mille a se discretum passibus in orientem prespectat Duæ in eo ecclesiæ celeberrimæ habentur una in eodem fundata loco, in quo Dominus ad discipulos suos habuisse dicitur sermones, altera in loco, de quo cœlum ascendisse traditur'

but Golgotha, in the middle between Anastasis and the Martyrium, is the place of the Lord's Passion, where also the rock appears which once bore the cross with the Lord's body on it And these places are found outside Sion, where a knoll of scanty size stands on the north

'But the Temple is placed in the lower part of the city near the east wall, and magnificently constructed, being formerly marvellous, of which a certain pinnacle of one of these ruined walls stands above the rest, which are demolished even to their foundations A few cisterns of water still in use are shown in that part of the city, which is to the north, in the neighbourhood of the Temple

'Bethesda appears famous for its Twin Pool, the one is filled generally by the winter showers, the other is discoloured with red waters

'On that face of Mount Sion which looks east, with a steep rock, below the walls and at the bottom of the hill, the Fountain of Siloa bursts forth, which issues not always, but at certain hours and days, running through caves and rocks, the water flows south from the entrance Near the wall of Jerusalem, or of the Temple, on the east, is Geennon, or the Valley of Josaphat, lying north and south, through which a torrent flows when it receives the rain waters

'Round the city of the Hierosolymites are found rugged and mountainous parts, where also the Mount of Olives is seen a mile to the east There are two very famous churches on it one is founded on that spot where the Lord is said to have held discourse with His disciples, the other in the place where He is held to have ascended to heaven'

The next is the account written by Theodorus, probably the architect of that name sent by Justinian about 530 A D to build the Basilica of St Mary

'2 In medio civitatis est basilica A parte occidentis intras in sanctam resurrectionem, ubi est sepulcrum Domini nostri

'In the midst of the city is a Basilica From the west you may enter the Holy Resurrection, where is the Sepulchre of our

Jesu Christi Et est ibi mons Calvariæ, ad quem montem per gradus callis est Ibi Dominus crucifixus est, et ibi est altare grande sub uno tecto est De sepulcro Domini usque in Calvariæ locum sunt passus numero XV In monte Calvariæ Abraham obtulit filium suum in holocaustum, et quia mons petræus est, in ipso monte, hoc est ad pedem montis ipsius, fecit Abraham altare Super altare eminet mons

'3 Et in circuitu montis sunt cancelli de argento. Et ibi est esca, ubi fuit resuscitatus per quem fuit crux Christi declarata cubiculum, ubi posita est crux Domini nostri Jesu Christi Et ipsa crux est de auro et gemmis ornata, et cœlum desuper aureum, et deforis habet cancellum Ibi est illud missorium, ubi portatum fuit caput Joannis Baptistæ ante Herodem regem Et ibi est cornu illud, unde unctus est David Et ibi plasmatus est Adam

'4 Postea intras in basilicam, in Golgotham, ubi inventæ sunt tres cruces absconditæ Et est ibi altare de auro et argento Et habet columnas novem aureas, quæ sustinent illud altare Et est in media basilica lancea, unde percussus fuit Dominus Jesus Christus in latus suum Et de ipsa lancea facta est crux, et sic lucet per noctem sicut sol per diem

'De Calvariæ loco usque in Golgotham passus sunt numero XV

'5 Inventio sanctæ crucis Quando inventa est ab Helena, matre Constantini, XVII kal octobris et per septem dies in Hierusalem ad sanctum sepulcrum Domini missæ celebrantur, et ipsa crux ostenditur

'6 De Golgotha usque in sanctam Sion passus numero CC, quæ est mater omnium ecclesiarum · quam Sion Dominus noster Christus cum apostolis fundavit Ipsa fuit domus sancti Marci evangelistæ Columna, quæ fuit in domo Caiphæ, ad quam Dominum

Lord Jesus Christ There also is Mount Calvary, to which mount the way is by steps There the Lord was crucified, and there is a great altar, it is (all) under one roof From the Sepulchre of the Lord to the place of Calvary are paces (passus) XV in number In Mount Calvary Abraham offered his son as a holocaust, and since it is a stony mountain, in this same mount, to wit at the foot of the mount itself, Abraham made an altar. Above the altar rises the mount

'And round the mount are silver railings, and there is the (esca) where he was brought to life by whom the cross of Christ was made known the cell where is placed the cross of our Lord Jesus Christ And the cross itself is adorned with gems and gold, and the roof above is gold, and outside is a railing (cancellum) There is the banquet hall (missorium), where the head of John the Baptist was brought before Herod the King And there is the horn wherewith David was anointed And there Adam was formed

'Afterwards, you may enter the Basilica in Golgotha, where the three crosses were hidden And there is an altar of gold and silver, and it has nine gold columns which sustain the altar there In the midst of the Basilica is the lance wherewith the Lord Jesus Christ was struck in His side And of this lance a cross is made, and it shines by night as the sun by day

'From the place of Calvary to Golgotha are paces XV by number

'The Invention of the Holy Cross When it was found by Helena, mother of Constantine, on the XVII of the calends of October, and for seven days masses are celebrated in Jerusalem at the Holy Sepulchre of the Lord, and the cross itself is shown

'From Golgotha even to Saint Sion are paces in number two hundred, which is the mother of all churches, which Sion our Lord Christ founded with His Apostles There was the House of St Mark the Evangelist. The column which was in the House of

nus Christus flagellatus, est modo in Sancta Sion. Jussu Domini ipsa columna secuta est, et quomodo eam, dum flagellaretur, amplexavit, sicut in cera, sic brachia ejus, manus vel digiti in ea hæserunt, et hodie paret, sed et faciem omnem, mentum, nasum vel oculos ejus, sicut in cera, designavit Et est ibi in media basilica corona spinea, unde coronatus fuit Dominus apud judæos, et misit manum suam super coronam Inde venis ad sacrarium. Et ibi est lancea Et ibi est lapis ille, unde lapidatus est sanctus Stephanus Ibi docebat Dominus discipulos suos, quum cœnavit cum eis

'De sancta Sion ad domum Caiphæ, quæ est modo ecclesia sancti Petri, sunt plus minus passus numero L

'7 De domo Caiphæ ad prætorium Pilati plus minus passus numero C Ibi est ecclesia sanctæ Sophiæ Juxta se missus est sanctus Hieremias in lacum

'8 Piscina Siloa a lacu, ubi missus est Hieremias propheta, habet passus numero C, quæ piscina intra murum est A domo Pilati usque ad piscinam probaticam plus minus passus numero C Ibi Dominus Christus paralyticum curavit, cujus lectus adhuc ibi stat Juxta piscinam probaticam est ecclesia dominæ Mariæ, ubi se lavabant infirmi et sanabantur.

'9 Et venis ad illam pinnam templi, ubi tentavit satanas Dominum nostrum Jesum Christum, et est ibi basilica in cruce posita Sanctus Jacobus, quem Dominus manu sua episcopum ordinavit, post ascensionem Domini de pinna templi præcipitatus est, et nihil ei nocuit, sed fullo cum de vecte, quem reportare consueverat, occidit, et positus est in monte Oliveti

'10 Sanctus Stephanus foras portam Galilææ lapidatus est Ibi et ecclesia ejus est, quam fabricavit domina Eudocia, uxor Theodosii imperatoris.

'11 Ibi est vallis Josaphat. Ibi judica

Caiphas, on which the Lord Christ was scourged, is now in St. Sion At the command of the Lord the column itself followed, and like as He embraced it, while He was scourged, so His arms, His hands, or His fingers, were stamped in it as in wax, and it still appears, and all His face, His chin, His nose, and His eyes, He marked as though in wax And there in the middle of the Basilica is the crown of thorns with which the Lord was crowned by the Jews, and He put His hand on the crown Thence you come to the sacristy, and there is the lance And there is that stone with which St Stephen was stoned There the Lord taught His disciples, when He supped with them

'From St Sion to the House of Caiphas, which is now the Church of St Peter, are about fifty paces by number

'From the House of Caiphas to the Prætorium of Pilate, about an hundred paces by number There is the Church of St Sophia Near it Jeremiah was placed in the pool.

'The Pool of Siloam is an hundred paces from the pool (lacus) where Jeremiah, the prophet, was put, which pool is inside the wall From the House of Pilate to the Sheep Pool is about an hundred paces There the Lord cured the paralytic, whose bed even yet remains there Beside the Sheep Pool is the Church of the Lady Mary, where the sick wash and are healed

'And you come to that pinnacle of the Temple where Satan tempted our Lord Jesus Christ, and there is a basilica of cross shape (in cruce posita) St. James, whom the Lord made bishop with His own hands, after the ascension of the Lord was thrown from the pinnacle of the Temple, and it did not hurt him, but a fuller slew him with the club he carried, and he was placed on the Mount of Olives

'St Stephen was stoned outside the Galilean Gate There is his church, which was made by the Lady Eudoxia, the wife of the Emperor Theodosius

'There is the valley of Josaphat There

turus est Dominus justos et peccatores Et ibi est fluvius Πύριφλεγέθων, qui ignem vomit in consummationem sæculi Et ibi est basilica sanctæ Mariæ, matris Domini, et ibi est sepulcrum ejus Et ibi Dominum Judas tradidit Et ibi est locus, ubi Dominus cœnavit cum discipulis suis Ibi et Dominus lavit pedes apostolorum Ibi sunt quatuor accubitus, ubi Dominus cum apostolis ipse medius accubuit, qui accubitus ternos homines recipiunt. Modo aliquanti pro religiositate ibi cum venerint, excepta carne cibaria sua comedere delectantur et accendunt luminaria, ubi ipse Dominus apostolis pedes lavit, quia ipse locus in spelunca est, et descendunt ibi modo CC monachi

'12 A pinna templi subtus monasterium est castimonialium, et quando aliqua earum transierit de sæculo, ibi intus in monasterio ipso reponitur, et quæ illuc intraverint, usquedum vivunt, inde non exeunt Quando aliqua de sanctimonialibus illuc converti voluerit, aut alicui pœnitenti huc tantummodo ipsæ portæ aperiuntur, nam semper clausæ sunt Victualia per murum accipiunt, et aquam de cisterna, quam apud se habent

'13 Deinde ascendis in montem De Hierusalem usque in montem Oliveti, quod scribitur, stadia septem sive milliarium unum Inde Dominus ascendit in cœlum Ibi sunt fabricatæ XXIIII ecclesiæ, et ibi prope est spelunca, quæ dicitur μάζα, quod interpretatur discipulorum, ubi Dominus quando prædicabat in Hierusalem, requiescebat In monte Oliveti posuit Dominus humeros super lapidem, in quo fixi ambo humeri adhuc apparent sicut in cera molli, qui locus ideo icona vocatur Et est illic etiam fabricata ecclesia, juxta quam est ecclesia, in qua sancta Pelagia requiescit Et ibi sunt duæ basilicæ, ubi docebat Christus discipulos suos Et inde venis ad Galilæam, ubi discipuli viderunt Dominum Jesum, postquam resurrexit a mortuis

the Lord will judge the just and the sinful There is the river Puriphlegethon, which will pour out fire at the end of time And there is the Basilica of St Mary, the Lord's mother, and there is her sepulchre And there Judas betrayed the Lord, and there is the place where the Lord supped with His disciples There also the Lord washed His Apostles' feet There are four couches where the Lord lay with His Apostles, Himself in the midst, which couches (accubitus) will hold three men and now some through piety, when they come there, delight to eat their food (save only meat) and light lamps where the Lord Himself washed His Apostles' feet, for that place is a cave, and only two hundred monks can enter it

'Under the pinnacle of the Temple is a nunnery or castimonialium, and when one of them goes from earth, she is placed in the monastery itself, and those who enter while they live do not go forth thence When anyone would be admitted to vows or for a penitent, then only the doors are opened, for they are ever shut They receive food from the wall, and water from a cistern which they have near them

'Thence you ascend on to the mountain From Jerusalem to the Mount of Olives, as is written, is seven stadia, or a mile Thence the Lord ascended to heaven There are built XXIIII churches, and there is the cave called Maza, which is interpreted "of the disciples," where the Lord, when He preached in Jerusalem, rested On the Mount of Olives the Lord placed His shoulders against a stone, in which the mark of both shoulders still appears printed as though in soft wax, which place is therefore called *Icon*, and there also is built a church, beside which is the church where St Pelagia reposes And there are two basilicas where Christ taught His disciples, and thence you come to the Galilee, where the disciples saw the Lord Christ after His resurrection from the dead

'Sanctus Jacobus et sanctus Zacharias et sanctus Simeon in una memoria positi sunt, quam memoriam ipse sanctus Jacobus fabricavit, corpora illorum ipse ibi recondidit et se ibi cum eis præcepit poni'

'St James and St Zachariah and St Simeon are placed in one monument, which St James himself made, and placed their bodies himself there, and commanded that he should be placed with them'

Arculfus, 'the holy bishop' of Gaul, visited the city about the year 680 A.D., and coming home was wrecked on the coast of Scotland, and gave an account of the Holy Places, with a rough plan, the earliest which exists, to the monks who entertained him. The translation which accompanies this text and the two following is that of Bohn's 'Early Travels in Palestine,' which is more tersely worded than the Latin

'Arculfus, sanctus episcopus, gente Gallus, diversorum longe remotorum peritus locorum, in Hierosolymitana civitate per menses novem hospitatus, et locis quotidianis visitationibus peragratis

Mœnia cernantur cujus in magno murorum ambitu octoginta quatuor turres portæ vero sex visuntur. prima porta David ad occidentem montis Sion, secunda porta vallis Fullonis, tertia porta sancti Stephani, quarta porta Beniamin, quinta portula, id est, parvula porta a qua per gradus ad vallem Iosaphat descenditur, sexta porta Thecuitis. Celebriores tamen ex his sunt tres exitus portarum unus quidem ab occasu, alius a septentrione, tertius ab oriente. A meridie autem, aquilonale montis Sion supercilium supereminet civitati, et pars murorum cum interpositis turribus nullas habere portas comprobatur, id est, a supra scripta David porta usque ad eam montis Sion frontem, quæ prerupta rupe orientalem respicit plagam.

Situs quippe ipsius urbis, a supercilio aquilonali montis Sion incipiens, ita est molli clivo dispositus usque ad humiliora aquilonalium orientaliumque loco murorum, ut pluvia ibi decidens nequaquam stet, sed instar fluviorum per orientales defluens portas, cunctis secum platearum fordibus raptis, in valle Iosaphat torrentem Cedron augeat.

'Diversarum gentium undique prope innumera multitudo quindecimo die mensis

'Arculf, the holy bishop, a native of Gaul, after visiting many remote countries, resided nine months at Jerusalem, and made daily visits to the surrounding districts

'He counted in the circuit of the walls of the holy city eighty-four towers and six gates, the latter being distributed in the following order: the Gate of David on the west of Mount Sion, the Gate of the Valley of the Fuller, St. Stephen's Gate, Benjamin's Gate, the little gate leading by a flight of steps to the valley of Jehoshaphat, and the gate called Tecuitis, of which, the three most frequented are, one to the west, another to the north, and a third to the east. That part of the wall which, with its towers, extends from the Gate of David over the northern brow of Mount Sion, which overlooks the city from the south, to the precipitous brow of the same mountain which looks to the east, has no gates.

'The city itself begins from the northern brow of Mount Sion, and declines with a gentle slope towards the walls on the north and east, where it is lower; so that the rain which falls on the city runs in streams through the eastern gates, carrying with it all the filth of the streets into the brook Cedron, in the valley of Jehoshaphat.

'On the 15th September, annually, an immense multitude of people of different

septembris anniversario more Hierosolymis convenire solet ad commercia mutuis venditionibus et emptionibus peragenda Unde fieri necesse est, ut per aliquot dies in eadem hospita civitate diversorum hospitentur turbe populorum, quorum plurima camelorum et equorum asinorumque numerositas, mulorum necnon et boum masculorum, diversarum vectarum rerum per illas politanas plateas stercorum abominationes propriorum passim sternit quorum nidor non mediocriter civibus invehit molestiam, que et ambulandi impeditionem prebit Mirum dictu, post diem supra memoratum recessionis cum diversis turmarum iumentis, nocte subsequente, immensa pluviarum copia de nubibus effusa super eandem descendit civitatem, que totas abluit abominabiles de plateis sordes ablutamque ab immunditiis fieri facit eam

'Ceterum in illo famoso loco, ubi quondam templum magnifice constructum fuerat, in vicinia muri ab oriente locatum, nunc Saraceni quadrangulam orationis domum, quam subiectis tabulis et magnis trabibus super quasdam ruinarum reliquias construentes, vili fabricati sunt opere, ipsi frequentant que utique domus tria hominum millia simul, ut fertur, capere potest

'Arculfus itaque de ipsius civitatis habitaculis a nobis interrogatus respondens, ait Memini me et vidisse et frequentasse multa eiusdem civitatis edificia, plurimasque domos grandes, lapideas, per totam magnam civitatem.

'Que utique valde grandis ecclesia, tota lapidea, mira rotunditate ex omni parte collocata est, a fundamentis in tribus consurgens parietibus, quibus unum culmen in altum elevatur, inter unumquemque parietem et alterum latum habens spatium vie, tria quoque altaria sunt in tribus locis parietis medii artifice fabricatis Hanc rotundam et summam ecclesiam supra memorata habentem altaria, unum ad meridiem respiciens, alterum ad aquilonem, tertium versus occasum, duodecim mire magnitudinis lapidæ

nations are used to meet in Jerusalem for the purpose of commerce, and the streets are so clogged with the dung of camels, horses, mules, and oxen, that they become almost impassable, and the smell would be a nuisance to the whole town But, by a miraculous providence, which exhibits God's peculiar attachment to this place, no sooner has the multitude left Jerusalem than a heavy fall of rain begins on the night following, and ceases only when the city has been perfectly cleansed

'On the spot where the Temple once stood, near the eastern wall, the Saracens have now erected a square house of prayer, in a rough manner, by raising beams and planks upon some remains of old ruins, this is their place of worship, and it is said that it will hold about three thousand men

'Arculf also observed many large and handsome houses of stone in all parts of the city.

'The church of the Holy Sepulchre is very large and round, encompassed with three walls, with a broad space between each, and containing three altars of wonderful workmanship, in the middle wall, at three different points, on the south, the north, and the west It is supported by twelve stone columns of extraordinary magnitude, and it has eight doors or entrances through the three opposite walls, four fronting the north-east, and four to the south east

sustentant columnæ. Hæc bis quaternales portas habet, hoc est quatuor introitus, per tres e regione, interjectis viarum spatiis, stabilitos parietes, ex quibus quatuor exitus ad vulturnum spectant, qui et cecias dicitur ventus, alii vero quatuor ad eurum respiciunt

'In medio spatio hujus interioris rotundæ domus rotundum inest in una eademque petra excisum tugurium, in quo possunt ter terni homines stantes orare, et a vertice alicuius non brevis staturæ stantis hominis usque ad illius domunculæ cameram pes et semipes mensura in altum extenditur Hujus tugurioli introitus ad orientem respicit, quod totum extrinsecus electo tegitur marmore, cuius exterius summum culmen auro ornatum auream non parvam sustentat crucem In hujus tugurii aquilonali parte sepulcrum Domini in eadem petra interius excisum habetur, sed eiusdem tugurii pavimentum humilius est loco sepulcri, nam a pavimento ejus usque ad sepulcri marginem lateris quasi trium mensura altitudinis palmorum haberi dignoscitur. Sic mihi Arculfus, qui sæpe sepulcrum Domini frequentabat, indubitanter emensus pronunciavit

'In the middle space of the inner circle is a round grotto cut in the solid rock, the interior of which is large enough to allow nine men to pray, standing, and the roof of which is about a foot and a half higher than a man of ordinary stature The entrance is from the east side, and the whole of the exterior is covered with choice marble to the very top of the roof, which is adorned with gold, and supports a large golden cross Within, on the north side, is the tomb of our Lord, hewn out of the same rock, 7 feet in length, and rising 3 palms above the floor These measurements were taken by Arculf with his own hand

'De illo supra memorato lapide, qui ad ostium monumenti dominici, in duas divisum partes refert, cuius pars minor, ferramentis dolata, quadratum altare in rotunda supra descripta ecclesia ante ostium sepe illius memorati tugurii, hoc est dominici monumenti, stans constitutum cernitur Major vero illius lapidis pars, eque circumdolata, in orientali ejusdem ecclesiæ loco, quadrangulum aliud altare, sub linteaminibus stabilitum exstat

'The stone that was laid at the entrance to the monument is now broken in two, the lesser portion standing as a square altar, before the entrance, while the greater forms another square altar in the east part of the same church, covered with linen cloths

'Totum simplex, a vertice usque ad plantas lectum unius hominis capacem super dorsum jacentis prebens, in modum spelunce introitum a latere habens ad australem monumenti partem e regione respicientem In quo utique sepulcro duodene lampades, juxta numerum duodecim apostolorum, semper die ac nocte ardentes lucent, ex quibus

'This tomb is broad enough to hold one man lying on his back The entrance is on the south side, and there are twelve lamps burning day and night, according to the number of the twelve Apostles, four within at the foot, and the other eight above, on the right-hand side Internally, the stone of the rock remains in its original state, and

quatuor in imo illius lectuli sepulcralis loco inferius posite, alie vero bis quaternales, super marginem ejus superius collocate ad latus dextrum, oleo nutriente fulgent

'Tugurium, nullo modo intrinsecus ornatu tectum usque hodie per totam ejus cavaturam feriamentorum ostendit vestigia, quibus dolatores sive excisores in eodem usi sunt opere color vero illius ejusdem petre monumenti et sepulcri non unus, sed duo permixti videntur, ruber itaque et albus

'Illi rotunde ecclesie supra sepius memorate que et anastasis, hoc est resurrectio, vocatur, eo quod in loco dominice resurrectionis fabricata est, ad dextram coheret partem Sancte Marie, matris Domini, quadrangulata ecclesia Alia vero pergrandis ecclesia, orientem versus, in illo fabricata est loco, qui hebraice Golgotha dicitur, in cujus superioribus grandis quedam erea cum lampadibus rota in funibus pendet, infra quam magna crux argentea infixa statuta est eodem in loco, ubi quondam lignea crux, in qua passus est humani generis salvator, infixa stetit

'In eadem ecclesia quedam in petra habetur excisa spelunca infra locum dominice Crucis, ubi super altare pro quorumdam honoratiorum animabus sacrificium offertur, quorum corpora interim in platea jacentia ponuntur ante januam eiusdem ecclesie Golgothanee

'Huic ecclesie in loco Calvarie quadrangulate fabricate structura, lapidea illa vicina orientali in parte coheret basilica magno cultu a rege Constantino constructa, que et martyrium appellatur, in eo, ut fertur, fabricata loco, ubi Crux Domini cum aliis latronum binis crucibus sub terra abscondita, post ducentorum triginta trium cyclos annorum, ipso Domino donante, reperta est

'Itaque inter has duales ecclesias ille famosus occurrit locus, in quo Abraham patriarcha altare composuit, super illud imponens lignorum struem, et ut Isaac immolaret filium suum, evaginatum arripuit gladium ubi nunc mensa habetur lignea

still exhibits the marks of the workman's tools: its colour is not uniform, but appears to be a mixture of white and red

'To the right of this round church (which is called the Anastasis, or Resurrection) adjoins the square church of the Virgin Mary, and to the east of this another large church is built on the spot called in Hebrew Golgotha, from the ceiling of which hangs a brazen wheel with lamps, beneath which a large silver cross is fixed in the very place where stood the wooden cross on which the Saviour of the human race suffered

'Under the place of our Lord's cross, a cave is hewn in the rock, in which sacrifice is offered on an altar for the souls of certain honoured persons deceased, their bodies remaining meanwhile in the way or street between this church and the round church

'Adjoining the church of Golgotha, to the east, is the basilica, or church, erected with so much magnificence by the Emperor Constantine, and called the Martyrium, built, it is said, in the place where the cross of our Lord with the other two crosses were found by divine revelation, two hundred and thirty-three years after they had been buried

'Between these two last-mentioned churches is the place where Abraham raised the altar for the sacrifice of his son Isaac, where there is now a small wooden table, on which the alms for the poor are offered Between the Anastasis, or round church, and

non parva, super quam pauperum eleemosyne a populo offeruntur Sed et hoc mihi diligentius interroganti sanctus Arculfus addidit, inquiens Inter anastasim, hoc est sepe supra memoratam rotundam ecclesiam, et basilicam Constantini quedam patet plateola usque ad ecclesiam Golgothanam, in qua videlicet die ac nocte semper lampades ardent

'Inter illam quoque Golgothanam basilicam et martyrium quedam inest exedra, in qua est calix Domini, quem a se benedictum propria manu in cena, pridie quam pateretur, ipse conviva apostolis tradidit convivantibus qui argenteus calix sextarii Gallici mensuram habet, duasque in se ansulas ex utraque parte altrinsecus continet compositas In quo utique calice inest spongia, quam Dominum crucifigentes obtulerunt ori ejus

'Idem Arculfus nihilominus et illam conspexit lanceam militis, qua latus Domini in cruce pendentis ipse percusserat Hec eadem lancea in portico illius Constantini basilice inserta habetur in cruce lignea, cujus hastile in duas scissum est partes

'De aliqua valde summa columna, que a locis sanctis ad septentrionalem partem in medio civitatis stans pergentibus obvia habetur, breviter dicendum est Hec eadem columna, in eo statuta loco, ubi mortuus juvenis, Cruce Domini superposita, revixit, mirum in modum in estivo solstitio meridiano tempore, ad centrum celi sole perveniente, umbram non facit

'Sanctorum locorum sedulus frequentator, sanctus Arculfus, Sancte Marie ecclesiam in valle Josaphat frequentabat, cujus dupliciter fabricate inferior pars sub lapideo tabulato mirabili rotunda structura est fabricata, in cujus orientali parte altarium habetur, ad dextram vero eius partem sancte Marie saxeum inest sepulcrum vacuum, in quo aliquando requievit sepulta Sed de eodem sepulcro, quomodo vel quo tempore aut a quibus personis sanctum corpusculum ejus sit sublatum, vel in quo loco resurrectionem exspectat, nullus, ut fertur, pro certo scire

the Basilica of Constantine, a certain open space extends to the Church of Golgotha, in which are lamps burning day and night

'In the same space between the Martyrium and the Golgotha, is a seat, in which is the cup of our Lord, concealed in a little shrine, which Arculf touched and kissed through a hole in the covering It is made of silver, of the capacity of about a French quart, and has two handles, one on each side In it also is the sponge which was held up to our Lord's mouth

'The soldier's lance, with which he pierced our Lord's side, which has been broken into two pieces, is also kept in the portico of the Martyrdom, inserted in a wooden cross

'He observed a lofty column in the holy places to the north, in the middle of the city (where the dead youth was revived, being placed on the Lord's Cross), which, at midday at the summer solstice, casts no shadow, which shows that this is the centre of the earth.

'Arculf next visited the holy places in the immediate neighbourhood of Jerusalem In the valley of Jehoshaphat he saw the round church of St Mary, divided into two stories by slabs of stone, in the upper part are four altars, on the eastern side below there is another, and to the right of it an empty tomb of stone, in which the Virgin Mary is said to have been buried, but who moved her body, or when this took place, no one can say On entering this chamber, you see on the right-hand side a stone inserted in the wall, on which Christ knelt when He prayed on

potest Hanc inferiorem rotundam Sancte Marie ecclesiam intrantes, illam vident petram ad dextram parietis insertam, supra quam Dominus in agro Gethsemane illa nocte, qua tradebatur a Iuda in manus hominum peccatorum, flexis oravit genibus ante horam traditionis eius in qua videlicet petra duorum vestigia genuum eius, quasi in cera mollissima profundius impressa, cernuntur.

'In eadem supra memorata valle, non longe ab ecclesia Sancte Marie, turris Josaphat monstratur, in qua ipsius sepulcrum cernitur Cui videlicet turricule quedam lapidea domus a dextra coheret parte, de rupe excisa et separata a monte Oliveti, in qua intrinsecus ferramentis cavata duo monstrantur sepulcra sine aliquo ornatu quorum unum illius Simeonis justi viri est, qui, infantulum Dominum Jesum in templo amplexus ambabus manibus, de ipso prophetizavit, alterum vero eque Joseph, sancte Marie sponsi

'In latere montis Oliveti quedam inest spelunca, haud procul ab ecclesia Sancte Marie in eminentiore loco posita contra vallem Josaphat, in qua duo profundissimi habentur putei, quorum unus sub monte magna profunditate descendit, altei vero in spelunce pavimento, cujus vastissima, ut fertur, cavitas, in profundum descendens, recto tractu dirigitur qui duo putei semper clauduntur In eadem ergo spelunca quatuor insunt lapidee mense, quarum una est, iuxta introitum spelunce ab intus sita, Domini nostri Jesu Christi, cui procul dubio mensule sedes ipsius adheret ubi cum duodecim apostolis, simul ad alias mensas ibidem habitas sedentibus, et ipse conviva aliquando recumbere solitus erat Illius putei os clausum, quem in pavimento spelunce inesse supra scripsimus, apostolorum mensis proprius haberi monstratur Hujus spelunce portula ligneo, ut refert sanctus Arculfus, concluditur ostio, qui eandem Domini speluncam sepius frequentavit

'Porta David montis Sion molli clivo ab occidentali adheret parte Per eandem de

the night in which He was betrayed, and the marks of His knees are still seen in the stone, as if it had been as soft as wax.

'In the same valley, not far from the church of St. Mary, is shown the tower of Jehoshaphat, in which his tomb is seen, adjoining to which little tower, on the right, is a separate chamber cut out of the rock of Mount Olivet, containing two hollow sepulchres, one, that of the aged Simeon the Just, who held the child Jesus in the temple, and prophesied of Him, the other of Joseph, the husband of Mary

'On the side of Mount Olivet there is a cave, not far from the church of St Mary, on an eminence looking towards the valley of Jehoshaphat, in which are two very deep pits One of these extends under the mountain to a vast depth, the other is sunk straight down from the pavement of the cavern, and is said to be of great extent These pits are always closed above In this cavern are four stone tables, one, near the entrance, is that of our Lord Jesus, whose seat is attached to it, and who, doubtless, rested Himself here while His twelve Apostles sat at the other tables There is a wooden door to the cave, which was often visited by Arculf.

'After passing through the Gate of David, which is adjacent to Mount Sion, we come to

civitate egredientibus, portam et montem Sion proximum ad sinistram habentibus, pons lapideus occurrit, eminus per vallem in austrum recto tramite directus, arcubus sussaltus, ad cuius medietatem ab occasu ille vicinus habetur locus, ubi Judas Iscariothis, desperatione coactus, laqueo se suspendit Ibidem et grandis hodie adhuc monstratur ficus, de cuius, ut fertur, vertice inlaqueatus pependit Judas, ut Juvencus, presbyter versificus, cecinit

"Informem raputt ficus de verticem ortem"'

a stone bridge, raised on arches, and pointing straight across the valley to the south; halfway along which, a little to the west of it, is the spot where Judas Iscariot hanged himself, and there is still shown a large fig-tree, from the top of which he is said to have suspended himself, according to the words of the poet presbyter Juvencus—

"Informem raputt ficus de vertice mortem"'

On Mount Sion, Arculf saw a square church, which included the site of our Lord's Supper, the place where the Holy Ghost descended upon the Apostles, the marble column to which our Lord was bound when He was scourged, and the spot where the Virgin Mary died Here also was shown the site of the martyrdom of St Stephen (as marked on his rough diagram) He saw on the south of Mount Sion a small field (Aceldama) covered with a heap of stones, where the bodies of many pilgrims are carefully buried, while others are left to rot on the surface

'Ab Elia septentrionem versus usque ad Samuelis civitatem, que Armathem nominatur, terra petrosa et aspera per quam monstrantur intervalla, valles quoque spinose usque ad Tamiticam regionem patentes Alia vero a supra dicta Elia et monte Sion qualitas regionum monstratur usque ad Cesaream Palestine occasum versus; nam quamvis aliqua ibi sint angusta et brevia et aspera loco interposita, precipue tamen latiores plani monstrantur campi, interpositis olivetis, letiores

'Aliarum arborum genera, exceptis vitibus et olivis, in monte Oliveti, ut refert Arculfus, raro reperiri possunt, segetes vero fumenti et hordei in eo valde lete consurgunt Non enim brucosa, sed herbosa et florida illius terre qualitas demonstratur Altitudo autem ejus equalis esse altitudini montis Sion videtur, quamvis mons Sion ad montis Oliveti comparationem in geometrie dimensionibus, latitudine videlicet et longitu-

'The ground to the north of Jerusalem, as far as the city of Samuel, which is called Ramatha, is at intervals rough and stony. There are open valleys, covered with thorns, extending all the way to the region of Tamnitis, but, on the other side, from Ælia (Jerusalem) and Mount Sion to Cæsarea of Palestine, though some narrow and craggy places are found, yet the principal part of the way is a level plain interspersed with olive-yards.

'Arculf states that few trees are found on Mount Olivet, except vines and olive-trees, but wheat and barley flourish exceedingly, the nature of the soil, which is not adapted to trees, is favourable to grass and flowers The height of this hill appears to be equal to that of Mount Sion, although it is much more extensive in length and breadth, the two mountains are separated by the valley of Jehoshaphat

dine, parvus et angustus videatur Inter hos duos montes vallis Josaphath, de qua superius dictum est, media interjacet a septentrionali plaga in australem porrecta partem

'In toto monte Oliveti nullus locus altior esse videtur illo, de quo Dominus ad celos ascendisse traditur, ubi grandis ecclesia stat rotunda, ternas per circuitum cameratas habens porticus desuper tectas cujus ecclesie interior domus, sine tecto et sine camera, ad celum sub aere nudo aperta patet, in cujus orientali parte altare sub angusto protectum tecto exstat Ideo itaque interior illa domus cameram non habet, ut de illo loco, in quo postremum divina cernuntur vestigia, cum in celum Dominus in nube sublevatus est, via semper aperta sit, et oculis exorantium ad celum patat

'Nam cum hec, de qua nunc pauca commemoravi, basilica fabricaretur, idem locus vestigiorum Domini, ut alibi scriptum repertum est, continuari operimento cum reliqua statorum parte non potuit Siquidem quecumque adplicabantur, insolens terra humana suscipere respuens, in ora adponentium rejecit Quin etiam a Domino concalcati pulveris adeo perenne documentum est, ut vestigia cernantur impressa, et cum quotidie confluentium fides a Domino calcata dirripiat, damnum tamen area non sentit, et eandem adhuc sui speciem, veluti impressis signata vestigiis, terra custodit'

'On the highest point of Mount Olivet, where our Lord ascended into heaven, is a large round church, having around it three vaulted porticoes The inner apartment is not vaulted and covered, because of the passage of our Lord's body, but it has an altar on the east side, covered with a narrow roof. On the ground, in the midst of it, are to be seen the last prints in the dust of our Lord's feet, and the roof appears open above, where He ascended, and although the earth is daily carried away by believers, yet still it remains as before, and retains the same impression of the feet

Saint Willibald, who follows, was a traveller about the year 722 A D

'Et inde venit ad Jerusalem in illum locum, ubi inventa fuerat sancta crux Domini. Ibi est nunc ecclesia in illo loco, qui dicitur Calvariæ locus Et hæc fuit prius extra Jerusalem, sed Helena, quando invenit crucem, collocavit illum locum intus intra Jerusalem Et ibi stant nunc tres cruces ligneæ foris in orientali plaga ecclesiæ, secus parietem, ad memoriam sanctæ crucis dominicæ et aliorum, qui cum eo crucifixi erant Illæ non sunt nunc in ecclesia, sed foris stant sub

'On his arrival at Jerusalem, he first visited the spot where the holy cross was found, where there is now a church which is called the Place of Calvary, and which was formerly outside of Jerusalem, but when St. Helena found the cross, the place was taken into the circuit of the city Three wooden crosses stand in this place, on the outside of the wall of the church, in memory of our Lord's cross and of those of the other persons crucified at the same time They are without

tecto extra ecclesiam Et ibi secus est ille hortus, in quo erat sepulchrum salvatoris Illud sepulchrum fuerat in petra excisum, et illa petra stat super terram, et est quadrans in imo et in summo subtilis Et stat nunc in summitate illius sepulchri crux, et ibi supra nunc ædificata est mirabilis domus, et in orientali plaga in illa petra sepulchri est ostium factum, per quod intrant homines in sepulchrum orare Et ibi est intus lectus, ubi corpus Domini jacebat Et ibi stant in lecto quindecim crateræ aureæ cum oleo ardentes die noctuque Ille lectus, in quo corpus Domini jacebat, stat in latere aquilonis intus in petra sepulchri, et homini est in dextra manu, quando intrat in sepulchrum orare Et ibi ante januam sepulchri jacet ille lapis magnus quadrans in similitudine prioris lapidis, quem angelus revolvit ab ostio monumenti

'Et illuc veniebat in festivitate sancti Martini episcopus noster Et cito ut illuc venit, cœpit ægrotare, et jacebat infirmus, usque una hebdomada erat ante natalem Domini Et tunc quando aliquid recreatus fuit et de infirmitate melius habebat, surgit et abiit ad illam ecclesiam, quæ vocatur sancta Sion Illa stat in medio Jerusalem Illic orabat, et inde ibat in porticum Salomonis Ibi est piscina, et illic jacent infirmi, exspectantes motionem aquæ, quando angelus veniret et moveret aquam, et tunc, qui primum in illam descenderet, sanaretur ubi Dominus dixit paralytico "Surge, tolle grabatum tuum et ambula"

'Sancta Maria in illo loco in medio Jerusalem exivit de sæculo, qui nominatur sancta Sion Et tunc apostoli undecim portaverunt illam, sicut prius dixi, et tunc angeli venientes tulerunt illam de manibus apostolorum et portaverunt in paradisum

'Et inde descendens episcopus Willibaldus venit ad vallem Josaphat Illa stat juxta Jerusalem civitatem in orientali plaga Et in illa valle est ecclesia sanctæ Mariæ, et in ecclesia est sepulchrum ejus non de eo,

the church, but under a roof And near at hand is the garden in which was the Sepulchre of our Saviour, which was cut in the rock That rock is now above ground, square at the bottom, but tapering above, with a cross on the summit And over it there is now built a wonderful edifice. And on the east side of the Rock of the Sepulchre there is a door, by which men enter the Sepulchre to pray And there is a bed within, on which our Lord's body lay, and on the bed stand fifteen golden cups with oil burning day and night The bed on which our Lord's body rested stands within the Rock of the Sepulchre on the north side, to the right of a man entering the Sepulchre to pray And before the door of the Sepulchre lies a great square stone, in the likeness of the former stone which the angel rolled from the mouth of the monument

'Our bishop arrived here on the feast of St Martin, and was suddenly seized with sickness, and lay sick until the week before the Nativity of our Lord And then, being a little recovered, he rose and went to the church called St. Sion, which is in the middle of Jerusalem, and, after performing his devotions, he went to the porch of Solomon, where is the pool where the infirm wait for the motion of the water, when the angel comes to move it, and then he who first enters it is healed. Here our Lord said to the paralytic, "Rise, take up thy bed, and walk!"

'St Mary expired in the middle of Jerusalem, in the place called St Sion, and as the twelve Apostles were carrying her body, the angels came and took her from their hands and carried her to Paradise.

'Bishop Willibald next descended to the valley of Jehoshaphat, which is close to the city of Jerusalem, on the east side And in that valley is the Church of St. Mary, which contains her sepulchre, not because her body

quod corpus ejus ibi requiescat, sed ad memoriam ejus Et ibi orans ascendit in montem Oliveti, qui est ibi juxta vallem in orientali plaga Illa vallis est inter Jerusalem et montem Oliveti Et in monte Oliveti est nunc ecclesia, ubi Dominus ante passionem orabat, et dixit ad discipulos "Vigilate et orate, ut non intretis in tentationem" Et inde venit ad ecclesiam in ipso monte, ubi Dominus ascendit in cœlum Et in medio ecclesiæ stat de ære factum sculptum ac speciosum, et est quadrans Illud stat in medio ecclesiæ, ubi Dominus ascendit in cœlum Et in medio æreo est factum vitreum quandiangulum, et ibi est in vitreo parvum cicindulum, et cuca cicindulum est illud vitreum undique clausum. Et ideo est undique clausum, ut semper ardere possit in pluvia, sed et in sole Illa ecclesia est desuper patula et sine tecto, et ibi stant duæ columnæ intus in ecclesia contra parietem aquilonis et contra parietem meridialis plagæ Illæ sunt in memoriam et in signum duorum virorum, qui dixerunt "Viri Galilæi, quid statis aspicientes in cœlum?" Et ille homo, qui ibi potest inter parietem et columnas repere, liber est a peccatis suis'

rests there, but in memory of it And having prayed there, he ascended Mount Olivet, which is on the east side of the valley, and where there is now a church, where our Lord prayed before His passion, and said to His disciples, "Watch and pray, that ye enter not into temptation" And thence he came to the church on the mountain itself, where our Lord ascended to heaven In the middle of the church is a square receptacle, beautifully sculptured in brass, on the spot of the Ascension, and there is on it a small lamp in a glass case, closed on every side, that the lamp may burn always, in rain or in fair weather, for the church is open above, without a roof, and two columns stand within the church, against the north wall and the south wall, in memory of the two men who said, "Men of Galilee, why stand ye gazing up into heaven?' And the man who can creep between the wall and the columns will have remission of his sins'

Bernard the Wise visited the city about the year 867 A D

'De Ramula festinavimus ad Emmaus castellum De Emmaus pervenimus ad sanctam civitatem Jerusalem Et recepti sumus in hospitale gloriosissimi imperatoris Caroli, in quo suscipiuntur omnes, qui causa devotionis illum adeunt locum lingua loquentes romana cui adjacet ecclesia in honore sanctæ Mariæ, nobilissimam habens bibliothecam studio prædicti imperatoris, cum XII mansionibus, agris, vineis et horto in valle Josaphat Ante ipsum hospitale est forum, in quo unusquisque ibi negotians in anno solvit duos aureos illi, qui illud providet

'Intra hanc civitatem, exceptis aliis ecclesiis quatuor eminent ecclesiæ mutuis sibimet parietibus cohærentes . una videlicet ad orien-

'From Ramula we hastened to the castle of Emmaus, and thence we went to the holy city of Jerusalem, where we were received in the hostel founded there by the glorious Emperor Charles, in which are received all the pilgrims who speak the Roman tongue, to which adjoins a church in honour of St Mary, with a most noble library, founded by the same Emperor, with twelve mansions, fields, vineyards, and a garden in the valley of Jehoshaphat In front of the hospital is a market, for which every one trading there pays yearly to him who provides it two aurei

'Within this city, besides others, there are four principal churches, connected with each other by walls, one to the east, which con-

tem quæ habet montem Calvariæ et locum, in quo reperta fuit crux Domini, et vocatur basilica Constantini, alia ad meridiem, tertia ad occidentem, in cujus medio est sepulchrum Domini habens IX columnas in circuitu, sui, inter quas consistunt parietes ex optimis lapidibus ex quibus IX columnis IV sunt ante faciem ipsius monumenti, quæ cum suis parietibus claudunt lapidem coram sepulchro positum, quem angelus revolvit et super quem sedit post peratam Domini resurrectionem De hoc sepulchro non est necesse plura scribere, cum dicat Beda in historia anglorum sua sufficientia, quæ et nos possumus referre Hoc tamen dicendum, quod sabbato sancto, quod est vigilia paschæ, mane officium incipitur in hac ecclesia et, post peractum officium, Kyrie eleison canitur, donec, veniente angelo, lumen in lampadibus accenditur, quæ pendent super prædictum sepulchrum de quo dat patriarcha episcopis et reliquo populo, ut illuminet sibi unusquisque in suis locis Hic autem patriarcha vocabatur Theodosius, qui ab meritum devotionis a christianis est raptus de suo monasterio, quod distat ab Jerusalem XV millia, et ibi patriarcha constitutus super omnes christianos, qui sunt in terra repromissionis Inter prædictas igitur IIII ecclesias est paradisus sine tecto, cujus parietes auro radiant, pavimentum vero lapide sternitur pretiosissimo, habens in medio sui confinium IIII catenarum, quæ veniunt a prædictis IIII ecclesiis in quo dicitur medius esse mundus

'Est præterea in ipsa civitate alia ecclesia ad meridiem, in monte Sion, quæ dicitur sancti Simeonis, ubi Dominus lavit pedes discipulorum suorum in qua pendet spinea corona Domini In hac defuncta traditur esse sancta Maria, juxta quam, versus orientem, est ecclesia in honore sancti Stephani in loco, in quo lapidatus esse asseritur In

tains the Mount of Calvary, and the place in which the cross of our Lord was found, and is called the Basilica of Constantine, another to the south, a third to the west, in the middle of which is the sepulchre of our Lord, having nine columns in its circuit, between which are walls made of the most excellent stones, of which nine columns, four are in front of the monument itself, which, with their walls, include the stone placed before the sepulchre, which the angel rolled away, and on which he sat after our Lord's resurrection It is not necessary to say more of this sepulchre, since Bede has given a full description of it in his history.[1] I must not, however, omit to state, that on Holy Saturday, which is the eve of Easter, the office is begun in the morning in this church, and after it is ended the *Kyrie Eleison* is chanted, until an angel comes and lights the lamps which hang over the aforesaid sepulchre, of which light the patriarch gives their shares to the bishops and to the rest of the people, that each may illuminate his own house The present patriarch is called Theodosius, and was brought to this place on account of his piety from his monastery, which is 15 miles from Jerusalem, and was made patriarch over all the Christians in the Land of Promise Between the aforesaid four churches is a parvis without roof, the walls of which shine with gold, and the pavement is laid with very precious stone, and in the middle four chains, coming from each of the four churches, join in a point which is said to be the middle of the world

'There is, moreover, in the city, another church on Mount Sion, which is called the Church of St Simeon, where our Lord washed the feet of His disciples, and in which is suspended our Lord's crown of thorns. St Mary is said to have died in this church Near it, towards the east, is a church in honour of St Stephen, on the spot where

[1] That is to say, Arculphus' account, which Bede inserts into his history

directum autem ad orientem est ecclesia in honore sancti Petri in loco, in quo Dominum negavit Ad aquilonem est templum Salomonis, habens synagogam Sarracenorum Ad meridiem sunt portæ ferreæ, per quas angelus Domini eduxit Petrum de carcere, quæ postea non sunt apertæ

'Exeuntes autem de Jerusalem descendimus in vallem Josaphat, quæ abest a civitate milliario, habens villam Gethsemane cum loco nativitatis sanctæ Mariæ, in quo est, in honore ipsius, ecclesia sanctæ Mariæ rotunda, ubi est sepulchrum illius, quod, supra se non habens tectum, minime pluvium patitur In ipso etiam loco est ecclesia, in quo Dominus traditus est, habens ibi quatuor mensas rotundas cœnæ ipsius In valle quoque Josaphat est ecclesia S Leontii, in qua dicitur Dominus venturus esse ad judicium

'Inde perreximus in montem Oliveti, in cujus declivio ostenditur locus orationis Domini ad patrem In latere autem prædicti montis ostenditur locus, in quo pharisæi deduxerunt ad Dominum mulierem in adulterio deprehensam Habetur ibi ecclesia in honore sancti Johannis, in qua servatur scriptura in lapide marmoreo, quam Dominus scripsit in terra

'In cacumine autem sæpius dicti montis, milliario uno a valle Josaphat, est locus ascensionis Domini ad patrem Habetur ibi ecclesia rotunda sine tecto, in cujus medio, hoc est in loco ascensionis Domini, habetur altare sub divo patens, in quo celebrantur sollemnia missarum

'Inde transivimus ad Bethaniam, quæ est ad meridiem, distans a monte Oliveti milliario uno, in descensu ipsius montis In quo est monasterium, cujus ecclesia sepulchrum monstrat Lazari juxta quod est piscina ad aquilonem in qua jussu Domini lavit se ipse Lazarus resuscitatus, qui dicitur postea exstitisse episcopus in Epheso XI annis In he is believed to have been stoned And, indirectly to the east, is a church in honour of St Peter, in the place where he denied our Lord To the north is the Temple of Solomon, having a synagogue of the Saracens To the south of it are the iron gates through which the angel of the Lord led Peter out of prison, and which were never opened afterwards

'Leaving Jerusalem, we descended into the valley of Jehoshaphat, which is a mile from the city, containing the village of Gethsemane, with the place of the nativity of St Mary In it is a round church of St Mary, containing her sepulchre, on which the rain never falls, although there is no roof above it There is also a church on the spot where our Lord was betrayed, containing the four round tables of His supper In the Valley of Jehoshaphat there is also a church of St Leon, in which it is said that our Lord will come at the Last Judgment

'Thence we went to Mount Olivet, on the declivity of which is shown the place of our Lord's prayer to the Father On the side of the same mountain is shown the place where the Pharisees brought to our Lord the woman taken in adultery, where there is a church in honour of St John, in which is preserved the writing in marble which our Lord wrote on the ground

'At the summit of the mountain, a mile from the valley of Jehoshaphat, is the place of our Lord's ascension, in the middle of which, on the spot from which He ascended, is an altar open to the sky, on which mass is celebrated

'Thence we proceeded to Bethany, which is to the south, on the ascent of the mountain, a mile from the top, there is here a monastery, with a church containing the sepulchre of Lazarus, near which, to the north, is a pool in which, by our Lord's command, Lazarus washed himself after he had been raised from the dead, and he is said

descensu etiam de monte Oliveti ad occidentalem plagam ostenditur marmor, de quo descendit Dominus super pullum asinæ Inter hæc ad meridiem, in valle Josaphat, est natatoria Siloe

to have been subsequently bishop in Ephesus forty years On the western declivity of Mount Olivet is shown the marble from which the Lord descended on the foal of an ass Between these, to the south, in the valley of Jehoshaphat, is the pool of Siloah.'

The original Latin of Sæwulf need not be given, as his description, though interesting, is not so important as those which precede His date is 1102 A D

'The entrance to the city of Jerusalem is from the west, under the citadel of King David, by the gate which is called the Gate of David The first place to be visited is the Church of the Holy Sepulchre, which is called the Martyrium, not only because the streets lead most directly to it, but because it is more celebrated than all the other churches, and that rightly and justly, for all the things which were foretold and forewritten by the holy prophets of our Saviour Jesus Christ were there actually fulfilled The church itself was royally and magnificently built, after the discovery of our Lord's cross, by the Archbishop Maximus, with the patronage of the Emperor Constantine, and his mother Helena In the middle of this church is our Lord's Sepulchre, surrounded by a very strong wall and roof, lest the rain should fall upon the Holy Sepulchre, for the church above is open to the sky This church is situated, like the city, on the declivity of Mount Sion The Roman Emperors Titus and Vespasian, to revenge our Lord, entirely destroyed the city of Jerusalem, that our Lord's prophecy might be fulfilled, which, as He approached Jerusalem, seeing the city, He pronounced, weeping over it, "If thou hadst known, even thou, for the day shall come upon thee, that thine enemies shall cast a trench about thee, and compass thee round, and keep thee in on every side, and shall lay thee even with the ground, and thy children with thee, and they shall not leave in thee one stone upon another" We know that our Lord suffered without the gate But the Emperor Hadrian, who was called Ælius, rebuilt the city of Jerusalem, and the Temple of the Lord, and added to the city as far as the Tower of David, which was previously a considerable distance from the city, for any one may see from the Mount of Olivet where the extreme western walls of the city stood originally, and how much it is since increased And the Emperor called the city after his own name, Ælia, which is interpreted the House of God Some, however, say that the city was rebuilt by the Emperor Justinian, and also the Temple of the Lord as it is now, but they say that according to supposition, and not according to truth For the Assyrians, whose fathers dwelt in that country from the first persecution, say that the city was taken and destroyed many times after our Lord's Passion, along with all the churches, but not entirely defaced

'In the court of the Church of our Lord's Sepulchre are seen some very holy places, namely, the prison in which our Lord Jesus Christ was confined after He was betrayed, according to the testimony of the Assyrians, then, a little above, appears the place where the holy cross and the other crosses were found, where afterwards a large church was built in honour of Queen Helena, but which has since been utterly destroyed by the Pagans, and below, not far from the prison, stands the marble column to which our Lord Jesus Christ was bound in the common hall, and scourged with most cruel stripes Near this is the spot

where our Lord was stripped of His garments by the soldiers, and next, the place where He was clad in a purple vest by the soldiers, and crowned with the crown of thorns, and they cast lots for His garments Next we ascend Mount Calvary, where the patriarch Abraham raised an altar, and prepared, by God's command, to sacrifice his own son, there afterwards the Son of God, whom He prefigured, was offered up as a sacrifice to God the Father for the redemption of the world The rock of that mountain remains a witness of our Lord's passion, being much cracked near the fosse in which our Lord's cross was fixed, because it could not suffer the death of its Maker without splitting, as we read in the Passion, "and the rocks rent" Below is the place called Golgotha, where Adam is said to have been raised to life by the blood of our Lord which fell upon him, as is said in the Passion, "And many bodies of the saints which slept arose" But in the Sentences of St Augustine, we read that he was buried in Hebron, where also the three patriarchs were afterwards buried with their wives Abraham with Sarah, Isaac with Rebecca, and Jacob with Leah, as well as the bones of Joseph, which the children of Israel carried with them from Egypt Near the place of Calvary is the Church of St Mary, on the spot where the body of our Lord, after having been taken down from the cross, was anointed before it was buried, and wrapped in a linen cloth or shroud

'At the head of the Church of the Holy Sepulchre, in the wall outside, not far from the place of Calvary, is the place called Compas, which our Lord Jesus Christ Himself signified and measured with His own hand as the middle of the world, according to the words of the Psalmist, "For God is my king of old, working salvation in the midst of the earth" But some say that this is the place where our Lord Jesus Christ first appeared to Mary Magdalene, while she sought Him weeping, and thought He had been a gardener, as is related in the Gospel These most holy places of prayer are contained in the court of our Lord's Sepulchre, on the east side In the sides of the church itself are attached, on one side and the other, two most beautiful chapels in honour of St Mary and St John, as they, participating in our Lord's sufferings, stationed themselves beside Him here and there On the west wall of the chapel of St Mary is seen the picture of our Lord's Mother, painted externally, who once, by speaking wonderfully through the Holy Spirit, in the form in which she is here painted, comforted Mary the Egyptian, when she repented with her whole heart, and sought the help of the Mother of our Lord, as we read in her life. On the other side of the Church of St John is a very fair monastery of the Holy Trinity, in which is the place of the baptistery, to which adjoins the Chapel of St John the Apostle, who first filled the pontifical see at Jerusalem These are all so composed and arranged, that any one standing in the furthest church may clearly perceive the five churches from door to door

'Without the gate of the Holy Sepulchre, to the south, is the Church of St. Mary, called the Latin, because the monks there perform divine service in the Latin tongue, and the Assyrians say that the blessed Mother of our Lord, at the crucifixion of her Son, stood on the spot now occupied by the altar of this church Adjoining to this church is another Church of St Mary, called the Little, occupied by nuns who serve devoutly the Virgin and her Son Near which is the Hospital, where is a celebrated monastery founded in honour of St John the Baptist

'We descend from our Lord's Sepulchre, about the distance of two arbalist-shots, to the Temple of the Lord, which is to the east of the Holy Sepulchre, the court of which is of great length and breadth, having many gates, but the principal gate, which is in front of the Temple, is called the Beautiful, on account of its elaborate workmanship and variety of

colours, and is the spot where Peter healed Claudius, when he and John went up into the Temple at the ninth hour of prayer, as we read in the Acts of the Apostles The place where Solomon built the Temple was called anciently Bethel, whither Jacob repaired by God's command, and where he dwelt, and saw the ladder whose summit touched heaven, and the angels ascending and descending, and said, 'Truly this place is holy," as we read in Genesis There he raised a stone as a memorial, and constructed an altar, and poured oil upon it, and in the same place afterwards, by God's will, Solomon built a temple to the Lord of magnificent and incomparable work, and decorated it wonderfully with every ornament, as we read in the Book of Kings It exceeded all the mountains around in height, and all walls and buildings in brilliancy and glory In the middle of which temple is seen a high and large rock, hollowed beneath, in which was the Holy of Holies In this place Solomon placed the Ark of the Covenant, having the Manna and the Rod of Aaron, which flourished and budded there and produced almonds, and the two Tables of the Testament here our Lord Jesus Christ, wearied with the insolence of the Jews, was accustomed to repose, here was the place of confession, where His disciples confessed themselves to Him, here the Angel Gabriel appeared to Zacharias, saying, "Thou shalt receive a child in thy old age," here Zacharias, the son of Barachias, was slain between the temple and the altar, here the child Jesus was circumcised on the eighth day, and named Jesus, which is interpreted Saviour, here the Lord Jesus was offered by His parents, with the Virgin Mary, on the day of her purification, and received by the aged Simeon, here, also, when Jesus was twelve years of age, He was found sitting in the midst of the doctors, hearing and interrogating them, as we read in the Gospel, here afterwards He cast out the oxen, and sheep, and pigeons, saying, "My house shall be a house of prayer," and here He said to the Jews, "Destroy this temple, and in three days I will raise it up" There still are seen in the rock the footsteps of our Lord, when He concealed Himself, and went out from the Temple, as we read in the Gospel, lest the Jews should throw at Him the stones they carried Thither the woman taken in adultery was brought before Jesus by the Jews, that they might find some accusation against Him There is the gate of the city on the eastern side of the Temple, which is called the Golden, where Joachim, the father of the Blessed Mary, by order of the Angel of the Lord, met his wife Anne. By the same gate the Lord Jesus, coming from Bethany on the Day of Olives, sitting on an ass, entered the city of Jerusalem, while the children sang, "Hosanna to the Son of David" By this gate the Emperor Heraclius entered Jerusalem, when he returned victorious from Persia with the cross of our Lord, but the stones first fell down and closed up the passage, so that the gate became one mass, until humbling himself at the admonition of an angel, he descended from his horse, and so the entrance was opened to him In the court of the Temple of the Lord, to the south, is the Temple of Solomon, of wonderful magnitude, on the east side of which is an oratory containing the cradle of Christ, and His bath, and the bed of the Virgin Mary, according to the testimony of the Assyrians

'From the Temple of the Lord you go to the church of St Anne, the mother of the Blessed Mary, towards the north, where she lived with her husband, and she was there delivered of her daughter Mary Near it is the pool called in Hebrew Bethsaida, having five porticoes, of which the Gospel speaks A little above is the place where the woman was healed by our Lord, by touching the hem of His garment, while He was surrounded by a crowd in the street.

'From St Anne we pass through the gate which leads to the Valley of Jehoshaphat, to the church of St Mary in the same valley, where she was honourably buried by the Apostles

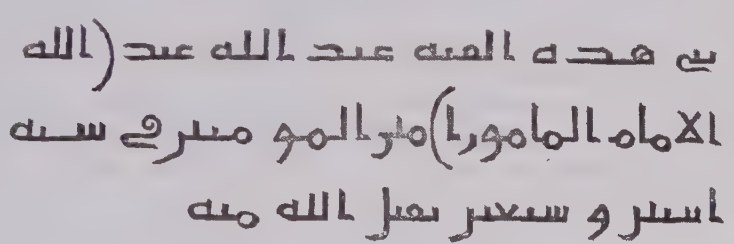
after her death, her sepulchre, as is just and proper, is revered with the greatest honours by the faithful, and monks perform service there day and night Here is the brook Cedron, here also is Gethsemane, where our Lord came with His disciples from Mount Sion, over the brook Cedron, before the hour of His betrayal, there is a certain oratory where He dismissed Peter, James, and John, saying, "Tarry ye here, and watch with me," and going forward, He fell on His face and prayed, and came to His disciples, and found them sleeping the places are still visible where the disciples slept, apart from each other Gethsemane is at the foot of Mount Olivet, and the brook Cedron below, between Mount Sion and Mount Olivet, as it were the division of the mountains, and the low ground between the mountains is the Valley of Jehoshaphat A little above, in Mount Olivet, is an oratory in the place where our Lord prayed, as we read in the Passion, 'And He was withdrawn from them about a stone's cast, and being in an agony, He prayed more earnestly, and His sweat was as it were great drops of blood falling down to the ground" Next we come to Aceldama, the field bought with the price of the Lord, also at the foot of Mount Olivet, near a valley about three or four arbalist-shots to the south of Gethsemane, where are seen innumerable monuments That field is near the sepulchres of the holy fathers Simeon the Just and Joseph the foster-father of our Lord These two sepulchres are ancient structures, in the manner of towers, cut into the foot of the mountain itself We next descend, by Aceldama, to the fountain which is called the Pool of Siloah, where, by our Lord's command, the man born blind washed his eyes, after the Lord had anointed them with clay and spittle

'From the church of St Mary before mentioned, we go up by a very steep path nearly to the summit of Mount Olivet, towards the east, to the place whence our Lord ascended to heaven in the sight of His disciples The place is surrounded by a little tower, and honourably adorned, with an altar raised on the spot within, and also surrounded on all sides with a wall On the spot where the apostles stood with His mother, wondering at His ascension, is an altar of St Mary, there the two men in white garments stood by them saying, "Ye men of Galilee, why stand ye gazing into heaven?" About a stone's throw from that place is the spot where, according to the Assyrians, our Lord wrote the Lord's prayer in Hebrew, with His own fingers, on marble, and there a very beautiful church was built, but it has since been entirely destroyed by the Pagans, as are all the churches outside the walls, except the church of the Holy Ghost on Mount Sion, about an arrow-shot from the wall to the north, where the Apostles received the promise of the Father, namely, the Paraclete Spirit, on the day of Pentecost, there they made the Creed In that church is a chapel in the place where the Blessed Mary died On the other side of the church is the chapel where our Lord Jesus Christ first appeared to the Apostles after His resurrection, and it is called Galilee, as He said to the Apostles, "After I am risen again, I will go before you unto Galilee" That place was called Galilee, because the Apostles, who were called Galileans, frequently rested there

'In the Galilee of Mount Sion, where the Apostles were concealed in an inner chamber, with closed doors, for fear of the Jews, Jesus stood in the middle of them and said, "Peace be unto you," and He again appeared there when Thomas put his finger into His side and into the place of the nails There He supped with His disciples before the Passion, and washed their feet, and the marble table is still preserved there on which He supped There the relics of St. Stephen, Nicodemus, Gamaliel, and Abido, were honourably deposited by St John the Patriarch after they were found The stoning of St Stephen took place about two or three arbalist-shots without the wall, to the north, where a very handsome church was built, which has been entirely destroyed by the Pagans The church of the Holy Cross,

about a mile to the west of Jerusalem, in the place where the holy cross was cut out, and which was also a very handsome one, has been similarly laid waste by the Pagans; but the destruction here fell chiefly on the surrounding buildings and the cells of the monks, the church itself not having suffered so much. Under the wall of the city, outside, on the declivity of Mount Sion, is the church of St. Peter, which is called the Gallican, where, after having denied his Lord, he hid himself in a very deep crypt, as may still be seen there, and there wept bitterly for his offence.'

The great Cufic inscription which runs just beneath the ceiling round the outer arcade of the Dome of the Rock gives the date of the erection of that beautiful building. The name of the founder has been replaced by that of a later Khalif (el Mamûn); but the forger forgot to alter the date, and the darker shade of blue in the ground colour betrays the alteration. The text at present reads thus:



which being translated means:

'Built this dome the servant of God, 'Abd (Allah the Imam Mamûn), Emir of the faithful, in the year two and seventy. May God be pleased thereby, and be gracious unto him. Amen.'

The Khalif el Mamûn reigned in the ninth century (813-833 A.D.), and made certain additions to the Dome of the Rock. The Khalif who was reigning in the year 72 of the Hejirah was 'Abd el Melek. The beginning of his name was left untouched, but the words within brackets were changed. It is to 'Abd el Melek, the fourth of the early Ommiyah Khalifs, that Arab writers attribute the erection of the building, giving the same date mentioned in the inscription, 72 A.H., or 688 A.D.

The same Arab authorities also state that the Dome of the Chain was the original model of the Dome of the Rock. Captain Conder has pointed out that the proportions of the smaller monument are reproduced by the larger, if we except the present exterior octagonal wall, the roof and doors of which bear dates of the ninth and tenth centuries. If this view

be accepted, it would appear that the Dome of the Rock, as originally constructed by 'Abd el Melek Ibn Merwân, consisted of a central drum supported on columns and piers and crowned by a dome, with an outer arcade supporting a sloping roof. The building, like the Dome of the Chain, would have been open at the sides, and the outer walls, which quite spoil the proportions of the structure, would not have been added until the time of el Mamûn.

Various alterations were made by the same Khalif 'Abd el Melek in the Aksa Mosque, which was the new name given to Justinian's Basilica of St. Mary And according to the Arab historian Jelâl ed Dîn, el Mahdi in the eighth century (775-781 A D) decreased the length of the Basilica and widened it The restorations of the Dome of the Rock effected by el Mamûn are twice recorded above each door, with the date 831 A D (216 A.H), and a beam above the outer octagonal wall has been found bearing a date equivalent to 913 A D

William of Tyre specially alludes to these mosaic inscriptions as being supposed to contain the date of the building; but being unable to read the 'Arabic idiom,' he refers them to Omar (William of Tyre, 1 2, viii 2).

In 1016 A D the Dome of the Rock was injured by earthquake, and the present woodwork of the cupola bears the date 413 A.H. (or 1022 A.D) in a very fine inscription in Karmatic characters, containing the names of Hakem, the famous Fatemite Khalif, and of his son, Abu el Hassan. A half-effaced inscription also records the restoration of the original glass mosaics in 1027 A D

We are thus brought to the next great period of building activity in Jerusalem, when, immediately after the capture of the city on Friday, 15th July, 1099, by the first Crusading army under Godfrey de Bouillon, the Christians at once commenced to restore the various existing churches and to build others

The existing cathedral church of the Holy Sepulchre is mainly the work of the Crusaders It was commenced in 1103 A D, and stood uninjured until 1808, when it was partly destroyed by fire The main structure is, however, still extant, and some of the mosaics described by Theodoricus in 1172 A D are yet visible on the walls The belfry was, however, originally some sixty feet higher than it now is The main part

of the rotunda, the three chapels south of it, and the corresponding northern chapel, with the northern aisle, the chapels of Adam and Calvary, and the subterranean chapel of Helena, are all supposed by De Vogué and Willis to be earlier than the Crusading period, while the last mentioned may even belong to the time of Modestus The choir and presbytery, with the great eastern dome, and the apse and outer gallery with chapels, are substantially the work of the Crusaders, as is the southern entrance and the little exterior chapel of St Mary the Egyptian, and the upper porch once giving access to the Calvary chapels The structure at present covering the Sepulchre itself is, however, of later date than the fire of 1808, as are the buildings on the east side of the southern courtyard

Next in importance to the Cathedral of the Holy Sepulchre was the great Hospice of the Knights of St John, immediately to the south. The principal buildings (which are now hidden under *débris*) were erected about 1130-1140 A D The Church of Sancta Maria Majora, adjoining the hospital on the east, belongs to the same period, and the remaining buildings, the ruins of which were excavated in 1872, south of this church, belonging to a convent, were built rather later, as is evidenced by the architecture

The Crusading Church of St Anne, which was restored by the French about 1860, also belonged to the first half of the twelfth century, and stood on the site of an older building. The large Church of St Mary Magdalen, in the present Moslem quarter, is mentioned in the Cartulary of the Holy Sepulchre as early as 1160 A D The Armenian Church of St. James is also mentioned by the pilgrims of the twelfth century The Cœnaculum church on Sion is of the same age, replacing the old Sion Church of Simeon or Peter A convent was erected beside it by Sancia, wife of Robert of Sicily, in 1313 A D The Franciscans continued to hold the site until 1561 A D, when it was taken from them by the Moslems The present Chapel of the Flagellation also represents the mediæval Church of the Virgin (Ubi Quievit); and the little Church of St James the Less, close to the Protestant Church on Sion, is a Crusading building. The Mosque of the Malawiyeh Derwishes, near the Damascus Gate, is a mediæval chapel, but its name is not known In the same quarter, south of the Magdalen Church, is the small Chapel of St Peter, and the yet

smaller Chapel of the Nativity of the Virgin, both evidently built in the twelfth century. The Chapel of the Crowning with Thorns still exists within the Turkish barracks at the north-west angle of the Haram; and in the present Jews' quarter there are two very interesting twelfth-century ruins, viz the Hospice of St. Mary of the Germans (founded in 1128 A.D.), of which a few traces are standing above the vaulted substructures among Jewish houses, and a little chapel, now inhabited, which may perhaps represent the Church of St Thomas of the Germans The following chapels of the same period are not now known, viz St Chariton (possibly the present Khankah of Saladin), north of the Holy Sepulchre, St Gilles, near the Mehkemeh, St Julian, St Cosmo, St. John, in the Via Dolorosa, St Elijah and St. Agnes, in the present Moslem quarter

Outside the city, the Crusaders erected a new church over the Tomb of the Virgin This was the work of Melisinda, wife of King Fulk, and was completed before 1161 A.D. It still remains almost unchanged. On Olivet stood the newly erected round Church of the Ascension (still in use), and the Pater Noster Chapel a stone's-throw distant The new Church of Gethsemane is mentioned by John of Wirtzburg, and above it were the Chapels of the Credo and of the Weeping On Sion, east of the Cœnaculum, was the Cave and Chapel of Gallicantus, where St. Peter was supposed to have heard the cock crow, but this site cannot now be identified with certainty There was also a Chapel of St Saviour, supposed to stand on the site of the house of Caiaphas; and south of Sion was St Mark, on the site now called Deir Abu Tor. North of Jerusalem was the great inn called the Asnerie, built by the Templars, and of which remains were discovered in 1875 A twelfth-century church has lately been excavated immediately north of the ruins of the Asnerie, but its mediæval name is unknown.

The above list, with the older Churches of St. Stephen, St. Mary Latin, St Mary the Little, and the old Basilica of the 'Forerunner' in David Street, gives a total of thirty-seven churches which are known to have existed in Jerusalem or in the vicinity of the city walls in the twelfth century. Nor is this all that remains of the Crusading town, for wherever the explorer walks through the Holy City he encounters mediæval remains. The whole of the present meat bazaar, adjoining the Hospital of St. John on the east, is Crusading work, representing the old street of Malcuisinat;

and the walls of the street leading thence towards the Damascus Gate, together with a fine vaulted building on the east side, are of mediæval masonry. The present Tower of David is the Crusading Castle of the Pisans, which was rebuilt as soon as the city was taken by Godfrey, and which was not destroyed when the walls of the city were demolished in 1219 A.D. The so-called Kalat Jâlûd, in the north-west angle of the present city, is the mediæval Tancred's Tower (William of Tyre, VIII. 5).

The walls of Jerusalem had only just been repaired by the Egyptians before Godfrey's siege in 1099 A.D. They were again repaired by the Christians in 1178 A.D., and by Saladin in 1192 A.D., but were dismantled in 1219 by Melek el Moazzam. The foundations of these mediæval walls are still visible on the north-west, outside the present wall of the city. The principal addition to the water-supply during the Christian domination consisted in the construction of the present Birket es Sultân, which was then known as Lacus Germani, and made by the Germans to water their horses ('Citez de Jerusalem' and Cartulary of Holy Sepulchre). It is not mentioned by any writer before 1172 A.D., when Theodoricus speaks of it as the Nova Cisterna. The present Bir Eyûb was also rediscovered and cleaned out in 1184 A.D., when it began to be identified as the site of En Rogel.

The Crusading work in the Haram enclosure remains to be mentioned. The Dome of the Rock was known to the mediæval Christian writers as Templum Domini. It is described by John of Wirtzburg, Fetellus, William of Tyre, Theodoricus, and several other writers during the period of the Christian domination. A Chapter of Canons of the Templum Domini was established in 1112, and various works were executed in the interior of the Haram between 1115 and 1136 A.D. (William of Tyre, VIII. 13; XV. 18). There is a remarkable statement in this author, to the effect that for fifteen years after the entry of the Christians the Sakhrah Rock remained open and visible (*patuit et aperta*). This might be thought to refer to non-existence of the outer wall, but the gates in that wall, as we have seen, bear the date 831 A.D. The arcade above the roof, on the top of the outer octagon-wall, is first mentioned by John of Wirtzburg, and has been thought possibly to be a Crusading addition, but the masonry of this wall is unlike mediæval work, and has not the peculiar dressing of the Crusading masonry. The arcade, with its double columns and round

arches, is very like the work lately described by Captain Conder at 'Ammân, which is supposed to be not later than the eleventh century It is probable that William of Tyre really refers to the casing of the Holy Rock with marble, and not to the outer wall of the building

The pictures with which the Crusaders decorated the Dome of the Rock were destroyed by Saladin, but three small Crusading altars still remain—two in the cave beneath the rock (the Makâms of David and Solomon), and the third within the grille towards the south-west, which until a few years since supported the so-called Shield of Hamzeh The capitals of the Mihrab, on the south side of the Dome, are also Christian, and the heads of angels are only partially defaced by the Moslems The magnificent grille or high iron screen, which shuts off the space beneath the dome from the outer arcade, is also French work of the twelfth century

Mediæval columns are built into a wall on the south side of the Platform, and the flagstones of the Platform are covered with Crusading masons' marks An old sundial used, until a few years since, to stand on the Platform south-west of the Dome of the Rock This is mentioned by John of Wirtzburg, Fetellus, and Theodoricus, in the twelfth century, as the site of the original Altar of the Temple, near which Zacharias, son of Barachias, was slain It has now been removed, but is marked on the Ordnance Survey Plan.

The Dome of the Chain was known to the Christians as the Chapel of St. James, and supposed to be the site of his tomb—a tradition differing from that noticed by Theodorus in 530 A.D., for he alludes to the sepulchre of the Bene Hezir (already noticed), now called the Tomb of St James.

The Schola Virginis, a vault mentioned by Theodoricus, appears to have been the cell of Kishan mentioned by Mejr ed Dîn, or possibly the Dome of the Roll The former was examined by Captain Conder in 1873, the latter is no longer existent The Porta Aurea of the Crusaders was the present Golden Gate, and the Porta Speciosa, on the west, was apparently the present Bâb es Silsileh, which is mentioned in 1564 A D by the present name in a Jewish tract (Jichus ha Aboth) The first distinct account of the so-called Stables of Solomon—the great vaults in the south-east angle of the Haram—is that of Theodoricus, writing in 1172 A D

John of Wirtzburg says they would hold 2,000 horses. The holes through which the Templars' horse-halters were passed are still to be seen in the piers of these great vaults, and the Single Gate appears to have been the Crusading southern entrance to the stables. The Chapel of the Cradle of Christ was called in the twelfth century Balneum Christi, and supposed to have been in or beside the house of Simeon. The niche for a statue, to which this tradition is attached, still lies recumbent in the little chamber in the south-east angle of the Haram.

The Order of the Templars was created by King Godfrey, and followed the rule of St. Augustine (William of Tyre, ix. 8). In 1118 some French Knights were established by King Baldwin I. in the Aksa Mosque, where he himself resided, and which is variously called Templum Salomonis and Palatium Salomonis by the twelfth-century writers. The Order received a rule from Pope Honorius in 1128 A.D. On their seal they engraved the Templum Domini, and the representation is evidently intended for the Dome of the Rock. There were nine grand-masters resident in Jerusalem between Hugh de Payens in 1118 A.D. and Thierry in 1187 A.D., when Jerusalem was taken by Saladin.

The Templars made considerable additions and alterations to the Aksa Mosque. On the east arm of the transept, beneath the dome, they placed an apse, the walls of which still remain visible in ruins. On the west they built a magnificent refectory, now known as Bukât el Beidha. The so-called Makâm of Omar, east of the south aisle of the Templars' Church, is probably an early Arab structure preceding the Crusading work, as are the four outer aisles of the Basilica itself—probably the work of el Mahdi in the eighth century, but the capitals of the slender columns which flank the Mihrab in the Makâm or Mosque of Omar were found, when the plaster was removed in 1874, to be beautifully carved with animal figures and scroll-work, evidently mediæval work. The porch of the Aksa Mosque, which is in Gothic style, is referred by De Vogué to the thirteenth century.

The following are the most valuable accounts of the city in the twelfth century. The first is that of Theodoricus, 'De Locis Sanctis,' dating 1172 A.D. It is principally valuable for its detailed description of the Crusading Cathedral of the Holy Sepulchre, and also of the Dome of the Rock, as existing during the Christian occupation.

'In ipsa denique montium summa eminentia, ut Josephus atque Hieronymus attestantur, sita est civitas illa Jerusalem, quæ universis per orbem urbibus et locis sanctior habetur et eminentior, non quia a se vel per se sit sancta, sed quia ipsius Dei et Domini nostri Jesu Christi ejusque piæ genitricis præsentia, et patriarcharum et prophetarum atque apostolorum, nec non et aliorum sanctorum inhabitatione, doctrina, prædicatione, martyrio fuerit illustrata. Quæ licet altiora, quam ipsa sit, montium juga scilicet habeat undique imminentia, tamen ipsa, in monte posita, in se ipsa existit colliculosa. Unde accidit, ut ab omnibus circumpositis montibus intuentibus ipsa rapiat adspectum. Denique inter collem Moriam, in quo templum Domini situm est, et montem Oliveti, qui cæteris montibus altius verticem attollit, torrens Cedron et vallis Josaphat interjacet, quæ a monte Gaudii, a quo ab aquilonari parte introitus patet in civitatem, initium faciens et per ecclesiam beatæ Mariæ, quæ ex ipsius nomine sic appellatur, et per sepulchrum Josaphat, regis Judææ, a cujus occisione hoc ipsa sumpsit vocabulum, nec non et juxta natatoriam Siloe cursum dirigens, occurrente sibi alia valle, ab angulo dextro civitatis per novas cisternas inter montem Sion et aquam Acheldemach cursum reflectente et duo civitatis latera complectente, in profundissimam dehiscit vallem. Sepulchrum vero Josaphat in vallis ipsius medio quadrato opere in modum pyramidis est erectum, circa quod habitacula servitorum Dei seu reclusorum plurima insunt, quæ omnia sub cura abbatis beatæ Mariæ constituta sunt. Porrigitur autem ipsa civitas ab aquilone in meridiem per longum et ab occidente in orientem per latum, turribus, muris et propugnaculis super valles prædictas in montis altitudine firmissime communita. Vallum quoque sive fossatum extrinsecus muro appositum et propugnaculis atque minis munitum existit, quod barbicana vocant. Portas habet septem, quarum sex singulis noctibus usque post solis ortum firmiter obserantur, septima vero muro conclusa nonnisi in die palmarum et in exaltatione sanctæ crucis aperitur. Et cum ipsa sit civitas oblonga, quinque habet angulos, quorum unus est transversus. Plateæ ejus omnes fere magnis lapidibus inferius constructæ, superius vero plurimæ sunt opere lapideo testudinatæ, fenestris passim ad lumen recipiendum dispositis. Domus, in altum operosa maceria porrectæ, tecta non nostro more culminibus sublimata, sed plano schemate habent æqualia. Ex quibus inundante pluvia in cisternis suis pluvialia stillicidia recipientes usibus suis reservant, nec enim alius aquis utuntur, quas non habent. Ligna ibi sive fabricis sive ignibus apta cara sunt, quia mons Libanus, qui solus cedrinis, cypressinis et abiegneis abundat lignis, longe ab eis est remotus, nec eum propter gentilium insidias adire possunt.

'Turris David incomparabili firmitate ex lapidibus quadratis infinitæ magnitudinis compacta, et juxta portam occidentalem, quæ versus Bethleem viam dirigit, sita cum adjacente solario et palatio noviter ædificato, fossatis et barbicanis valde munito, in proprietatem cessit regis hierosolymitani. Sita autem est in arcu montis Sion. Unde dicitur in libro Regum: Cepit David autem Sion. Sita est etiam e regione templi Domini, quo civitas porrigitur per latum, habens a meridie montem Sion, ab oriente montem Oliveti. Mons autem Sion ab ipsa turri usque ad ecclesiam beatæ Mariæ foris muros sitam et ab ipsa ecclesia fere usque ad palatium Salomonis et usque ad viam, quæ de speciosa porta ad ipsam turrim ducit, dilatatur, monte quidem Oliveti latior, sed humilior. Et cum mons Moria valli Josaphat incumbens, in quo templum Domini et palatium Salomonis est situm, magnus collis habeatur, mons Sion tanta fere altitudine illi superincumbit, quanta rursus ille valli Josaphat, ut supra dictum est, supereminere videtur. In agro Acheldemach, quem ab ipso prædicta tantum dividit vallis, sepultura peregrinorum est, in qua ecclesia sanctæ Dei genitricis et virginis Mariæ habetur, ubi etiam in die sancto palmarum quemdam fratrem nostrum defunctum, nomine

Adolfum, de Colonia natum, sepelivimus Ipsi autem agro mons Gion incumbit, in quo, ut in libro Regum legitur, Salomo regium diadema suscepit

'De aliis ædificiis communibus sive privatis nulla vel pauca potuimus reperire signa præter domum Pilati juxta ecclesiam beatæ Annæ, matris dominæ nostræ, et juxta piscinam probaticam sitam De omni opere ab Herode, ut Josephus refert, facto, modo plurimum truncato, nihil occurrit nisi unum latus, quod adhuc restat, palatii, quod vocabatur Antonia, cum porta juxta atrium exterius sita

'Restat ergo, ut de locis sanctis, propter quæ ipsa civitas sancta vocatur, disseramus Unde a sancto sanctorum vel a sepulchro dominico duximus incipiendum Ecclesia dominici sepulchri mirifico fulgens opere ab Helena regina constat esse fundata, cujus exterior murus quasi per circuli circumferentiam traductus ipsam ecclesiam facit esse rotundam Locus autem dominici sepulchri vicem centri in ipsa ecclesia obtinet, cujus dispositio ædis est opus super ipsum sepulchrum erectum et marmoreo tabulatu decenter ornatum Non integram circuli habet circumferentiam, sed ex ipso circulo versus orientem duo parvi parietes procedentes et tertium recipientes tria in se continent ostiola, tres in latitudine, septem in altitudine pedes habentia, quorum unum ab aquilone, secundum ab oriente, tertium a meridie patet Ab aquilonali intratur, a meridiano exitur, orientale custodum sepulchri usibus vacat Inter hæc tria ostiola et quartum, quo ad ipsum sepulchrum intratur, altare quidem parvum, sed reverendum habetur, ubi corpus dominicum, antequam sepulturæ daretur, positum fuisse a Joseph et Nicodemo narratur Denique super os ipsius speluncæ, quod retro ipsum altare situm est, ab eisdem per picturam musivi operis corpus Domini sepulturæ mandatur, adstante domina nostra, ejus matre, et tribus Mariis bene ex evangelio notis cum aromatum vasculis, supersedente etiam angelo ipsi sepulchro et lapidem revolvente atque dicente Ecce locum, ubi posuerunt eum Inter ipsum quoque foramen et ipsum sepulchrum linea per hemicyclum in longum porrigitur hos continens versus

'Christo surgenti
locus et custos monumenti
Angelus et vestis
fuit estque redemtio testis

Hæc omnia musivo opere pretiosissimo sunt depicta, quo opere tota illa domuncula est decorata. Utræque vero januæ acerrimos habent custodes, qui non minus quam sex, nec plus quam duodecim simul intromittunt, nec enim plures loci capit angustia Per aliam, postquam adoraverint, januam exire compelluntur Ipsum autem os speluncæ nonnisi rependo cruribus quislibet valet intrare, quod pertransiens optabilem thesaurum invenit, sepulchrum videlicet, in quo benignissimus Dominus noster Jesus Christus triduo requievit, pario marmore, auro et lapidibus pretiosis mirifice decoratum Tria in latere rotunda habet foramina, per quæ ipsi lapidi, in quo Dominus jacuit, optata peregrini porriguntur oscula, duos et semis pedes in latitudine, cubitum virilem et pedem habens in longitudine. Planities vero inter ipsum sepulchrum et murum posita tantum obtinet spatii, ut quinque homines versis ad sepulchrum capitibus locum habeant geniculatim orandi Extrinsecus igitur circa ipsum opus decem columnæ sunt dispositæ, quæ sibi impositos gestantes arcus cancellatum efficiunt circillum, cui limbus suppositus est, hanc aureis litteris insculptam continens scripturam Christus resurgens ex mortuis jam non moritur Mors illi ultra non dominabitur, quod enim vivit, vivit Deo Cæterum ad caput ipsius, quod ad occidentem versum fuit,

altare ferreis parietibus et januis atque seris circumseptum continetur cancellis cypressinis varia pictura decoratis et tecto ejusdem generis similiter decorato ipsis parietibus incumbente Tectum ipsius operis ex tabulis cupreis deauratis consistit, in medio foramine rotundo existente, circa quod columnellæ in circuitu constitutæ et arculos impositos gestantes superpositum tectum simile ciborio continent Super tectum quoque ipsum crux deaurata et super crucem columba continetur similiter deaurata Inter duas autem columnellas superius ab arcubus, in singulis suis arcubus, singulæ lampades dependent in circuitu Similiter quoque inter inferiores columnas per circuitum binæ lampades dependent Circa ipsos vero arcus inferiores ipsi versus in unoquoque arcu descripti sunt, quos nequaquam propter colorum in quibusdam abolitionem legere potuimus, nos tamen sex in tribus arcubus tantum ad planum valuimus comprehendere.

'Venit in hunc loculum qui condidit antea sæclum
Ejus adis tumulum, cito fac, ut sis mihi templum
Cernere gratum
quem cupit agnum
concio patrum,
Ephrata natum,
Golgatha passum,
petra sepultum,
hic protoplastum
vexit ad astrum,
dæmonis astum
vicit, et ipsum
surgere lassum
dans, ait Assum

'Circa ferreum vero parietem ad caput, ut diximus, constitutum, cui cancelli superpositi sunt, linea per circuitum porrigitur hos continens versus

'Mors hic deletur
et nobis vita medetur.
Hostia grata datur,
cadit hostis, culpa lavatur
Cœlum lætatur,
flent tartari, lex renovatur
Ista docent, Christe,
quia sanctus sit locus iste

'Cæterum pavimenta ipsius ecclesiæ pario et vario marmore speciosissime sunt constrata Ipsa vero ecclesia quadratis columnis VIII, quæ vocantur pilaria, et XVI rotundis columnis de uno lapide existentibus inferius sustentatur, superius vero, quum inferius et superius sicut ecclesia Aquisgrani testudinata est, octo similiter pilariis et XVI columnis fulcitur Cymatium inferius, quod per totam ecclesiam circulariter traductum est, græcis litteris descriptum est per totum Spatium vero muri, quod medio atque superno cymatio interjacet, musivo opere incomparabili specie præfulget, ubi in fronte chori vel supra arcum sanctuarii, eodem quidem opere, sed antiquo, gratissimo vultu puer Jesus refulgens umbilico tenus cernitur esse de-

pictus, ad sinistram vero ipsius manum mater sua, ad dextram autem Gabriel archangelus illam notam depromens salutationem Ave, Maria, gratia plena, Dominus tecum, benedicta in mulieribus et benedictus fructus ventris tui Hæc salutatio tam latine, quam græce circa ipsum Dominum Christum descripta est Ulterius quoque ad dextram partem XII apostoli per ordinem eodem opere sunt depicti, habentes singuli eulogias Christi mysteriis competentes in manibus suis In medio autem eorum Constantinus imperator pro eo, quod una cum matre Helena ipsius ecclesiæ fundator exstitit, in fenestra muro non profunde imposita regali munificentia trabeatus consistit Post apostolos quoque sanctus Michael archangelus mirifice decoratus effulget Sequitur ad sinistram ordo XIII prophetarum, qui omnes ad ipsum speciosum puerum versas habentes facies et prophetias olim ab ipso eis inspiratas manibus præferentes venerabiliter locuti sunt In quorum medio e regione sui filii sancta Helena regina magnifice decorata consistit Ipsi deinde muro tectum plumbeum cypressinis laquearis sustentatum incumbit, habens grande et rotundum in supremo foramen, per quod immissum superne lumen totam ecclesiam perlustrat, nec aliam aliquam fenestram habet

'Præterea sanctuarium vel sancta sanctorum, a Francis postea opere mirifico constructum, hujus ecclesiæ corpori adjunctum est, qui etiam divinas in ea laudes die ac nocte delectissime celebrant, scilicet canonicis horis prope cursum virginis Mariæ præmia tenentes, quorum stipendiis media pars oblationum dominici sepulchri deputata est, altera medietas patriarchæ usibus attributa est Principale altare nomini et honori Domini salvatoris articulatum est, retro quod patriarchalis sedes sita est, supra quam icona dominæ nostræ permaxima et reverendissima, simul et icona beati Johannis Baptistæ, nec non et tertia icona paranymphi sui sancti Gabrielis ab arcubus sanctuarii dependent In ipsa autem sanctuarii cœlatura ipse Dominus noster Jesus Christus, in sinistra crucem ferens, dextra Adam tenens, cœlum imperialiter intuens, giganteo passu sinistro pede levato, dextro adhuc in terra posito, cœlos penetrat, circumstantibus his sua scilicet matre et beato baptista Johanne et omnibus apostolis Sub cujus pedibus linea de muro ad murum per ipsum hemicyclum porrecta hanc continet scripturam

'Crucifixum in carne laudate
et sepultum propter nos glorificate
resurgentemque a morte adorate

Dehinc in linea superiore per idem hemicyclum ducta hæc continetur scriptura Ascendens Christus in altum captivam duxit carnem, dedit dona hominibus Circa medium vero ipsius chori altare cavum et parvum, sed reverendum habetur, in cujus pavimento cruciola in rotundo circulo est impressa, hoc significans, quod Josephus et Nicodemus corpus dominicum de cruce depositum ibi deposuerunt ad lavandum Ante ostium vero ipsius chori altare non mediocre habetur, quod ad Surianorum tantummodo spectat officium Denique, peractis a Latinis quotidie divinis officiis, Suriani vel ibidem ante chorum sive in aliqua ecclesiæ abside divinos decantare solent hymnos, qui etiam plura in ipsa ecclesia habent altariola nulloumque nisi suis usibus apta vel concessa Hæ sunt professiones sive sectæ, quæ in ecclesia hierosolymitana divina peragunt officia, scilicet Latini, Suriani, Armenii, Græci, Jacobini, Nubiani Hi omnes tam in conversatione, quam in divinis officiis suas quisque habent differentias Jacobini in suis festis Hebræorum more tubis utuntur

'Moris est in ecclesia sancti sepulchri, in sabbato sancto paschæ oriente sole tam in ipsa ecclesia, quam in cunctis aliis per civitatem constitutis ecclesiis materiale lumen exstinguere et lumen cœlitus venturum exspectare, ad quod lumen recipiendum una ex lampadibus

argenteis, quarum ibi septem dependent, ante ipsum sepulchrum præparatur Totus deinde clerus et populus in magna et anxia exspectatione constitutus, donec Deus manum suam de alto emittat, præstolantur, sæpius, alius adjunctis precibus, Deus ad juvet et sanctum sepulchrum alta vociferatione non sine lacrymis intonantes Interim tam patriarcha sive alii episcopi, qui ad susceptationem sacri ignis conveniunt, quam et alius clerus cum cruce, in qua maxima portio ligni dominici continetur, nec non et alius sanctorum reliquiis sæpius orandi causa visitare ipsum sepulchrum solent, lustrantes etiam, si Deus adhuc luminis sui gratiam vasi ad hoc constituto immiserit Solet quippe ipse ignis in certis horis et locis sæpe exhiberi Nam aliquando circa horam primam, aliquando circa tertiam vel sextam sive nonam horam vel etiam completorii tempore solet advenire Aliquando quoque ad ipsum sepulchrum, aliquando ad templum Domini, nonnunquam ad sanctum Johannem solet venire Ipsa vero die, qua nos pauperes cum aliis peregrinis in ipsius sancti ignis eramus exspectatione, statim post horæ nonæ tempus sacer ille ignis advenit, cum ecce concrepantibus ecclesiasticis signis munia missalis officii per totam civitatem persolvebantur, baptisteriis et cæteris officiis antea peractis Mox vero ut sacer ille ignis advenerit, antequam aliquis suam candelam prætei patriarcham accendat, ad templum Domini solet repræsentari

'Ab occidentale fere enim parte in exitu ecclesiæ ipsius, quo per gradus amplius quam XXX ad plateam ab ecclesia ascenditur, ante ipsum exitum capella in honore beatæ Mariæ habetur, cui præsunt Armenii Item ad sinistram ecclesiæ a septentrionale parte capella in honore sanctæ crucis existit, ubi etiam ipsius venerabilis ligni magna portio auro et argento inclusa tenetur, quæ sub Surianorum custodia consistit Rursus ab eadem parte juxta ipsam capellam versus orientem summe venerabilis habetur capella, in qua altare reverendum honori sanctæ crucis articulatum et ejusdem beati ligni maxima pars auro, argento et lapidibus pretiosis, ita ut videri apte queat, inclusa summa cum reverentia in locello speciosissimo observatur, quod etiam salutare signum adversus paganos in bello, cum necessitas exigit, gestare solent christiani Hæc etiam capella musivo opere mirabiliter est decorata Hanc autem crucem Heraclius, romanus imperator, Cosdre, regi Persarum, bello cum eo gesto ereptam christianis restituit Juxta ipsam quoque capellam versus orientem ad obscuram quamdam capellam per XX fere gradus intratur, ubi altare itidem venerandum existit, sub cujus pavimento cruciola cernitur impressa In quo loco Dominus noster Jesus Christus reclusus fuisse perhibetur, quando de judicio Pilati ad locum passionis diutius exspectavit, donec ei et facies velaretur et in Calvaria crux constitueretur, ut in ea posset appendi Item post ipsam capellam altare in honore sancti Nicolai existit Dehinc porta claustralis, qua in claustrum intratur canonicorum, quod circa sanctuarium est constitutum Post claustralis autem ambitus circuitionem ex alia parte ecclesiam intrantibus occurrit imago crucifixi supra ipsam claustralem portam ita depicta, ut cunctis intuentibus magnam inferat compunctionem, circa quam isti versus descripti sunt

'Aspice, qui transis, qui tu mihi causa doloris
Pro te passus ita, pro me tu noxia vita

'Dehinc versus orientem XXX et amplius gradus ad venerabilem beatæ Helenæ reginæ capellam extra ipsam ecclesiam sitam descenditur, ubi in ejus honore altare venerandum habetur Hinc iterum ad dextram partem per XV vel paulo plus gradus in subterraneum specum descenditur, ubi in dextro specus ipsius angulo cavum altare et sub eo crux pavimento impressa cernitur, in quo loco ipsa regina crucem dominicam reperisse narratur ubi altare in

honore sancti Jacobi habetur Ipsa quoque capella nullam habet aliam fenestram nis magnum superne foramen

'Ex alia nihilominus parte ecclesiæ vel in dextro retro chorum altare decorum existit, in quo pars magna columnæ, circa quam Dominus ligatus et flagellatus est, consistit Exinde ad meridiem ante ipsius ecclesiæ januam quinque sepulchra videntur, quorum unum pretioso opere factum de pario marmore et choro contiguum fratris est regis Hierosolymorum nomine Baldewini, secundum regis Baldewini, fratris ducis Godefridi, super quod tale scriptum est epitaphium

'Rex Balduuinus alter Judas Machabæus,
Spes patriæ, decus ecclesiæ, virtus utriusque.
Quem formidabant, cui dona, tributa ferebant
Cedar et Aegyptus, Dan ac homicida Damascus
Proh dolor in modico clauditur hoc tumulo

Deinde tertium sepulchrum fratris est ipsius, ducis Godefridi, qui ipsam civitatem Hierosolymam, a Saracenis invasam et Turcis, gladio et sapientia recuperavit et christianis restituit, patriarcham a paganis ejectum in sede sua relocavit, clerum in ipsa ecclesia instituit, stipendia ei, ut Deo militare valeret, ordinavit Quartum sepulchrum patris est istius regis seu Emalrici, quintum patris abbatissæ sancti Lazari.

'Iterum fere ad meridem janua paret, per quam in capellam intratur sub turri campanaria constitutam, et ex illa in aliam capellam reverentia plenam, honori beati Johannis Baptistæ adscriptam transitur, in qua etiam baptisterium exstat Et ex ipsa rursus in tertiam capellam pervenitur De prima autem gradibus XL vel plus ascenditur ad plateam.

'Restat nunc de monte Calvaria dicere, qui sicut oculus in capite, ita ipsa in illa resplendet ecclesia, unde per filii Dei mortem et sanguinis effusionem lux et vita nobis proveniet æterna Ante ipsius ecclesiæ introitum sive januam solido ære indutam, quæ etiam duplex esse dignoscitur, gradibus fere XV ad quoddam parvum, sed cancellatum et picturis decoratum ascenditur consistorium, cujus desuper adstantes custodes et januas observantes, quantos volunt peregrinos intrare, permittunt, ne forte ex magna compressione, quæ sæpius ibi solet accidere, oppressio aliqua sive periculum mortis eveniat De illo quoque vestibulo per aliud ostium tribus ascenditur gradibus in capellam veneratione et reverentia cunctis sub sole locis supereminentem, quæ quatuor fornicibus grandi robore præditis erecta subsistit, cujus pavimenta omnigeno marmore egregie constrata, testudo vero sive cœlatura ipsius prophetis, David scilicet, Salomone, Isaia et quibusdam aliis, scripta passioni Christi consonantia munu gestantibus, musivo opere in ea depictis nobilissime est adornata, ita ut illi operi nullum sub cœlo posset æquari, si tantum clare posset videri Nam propter circumstantes fabricas locus idem aliquantulum obscuratur. Locus autem, ubi crux ipsa stetit, in qua salvator mortem pertulit, versus orientem alto gradu elatus, pario et nobilissimo marmore ex sinistra parte constratus, foramen rotundum et adeo latum, quod caput fere posset intrudi, ostenditur, in quo crux ipsa defixa fuisse dignoscitur in quod peregrini caput et faciem ob ipsius crucifixi amorem et reverentiam solent imprimere Ad dextram vero ipse mons Calvaria, altius verticem attollens, pavimento longam, latam et valde profundam rimam ex scissura, quam in morte Christi sustinuit, demonstrat Insuper anterius horribili foramine hiscens, sanguinem qui de latere pendentis in cruce Christi cucurrerit, usque ad terram se emisisse testatur In cujus summitate peregrini cruces, quas de terris suis secum illo adduxerint, solent deponere, quarum magnam ibi copiam vidimus, quas omnes custodes Calvariæ in sabbato ignibus solent

exurere Altare venerandum in ea habetur, et in parasceve omne diei illius officium a patriarcha et clero ibidem percelebratur In sinistra altaris parte, in muro ipsius, crucifixi imago miræ pulchritudinis est depicta, adstante ad dextram Longino cum lancea latus pungente, a sinistra Stephaton cum spongia et arundine acetum offerente, adstante etiam ad sinistram matre, ad dextram Johanne, per circuitum vero ipsius duo grandes perliguntur Lineæ litteris græcis per totum descriptæ Ad dextram quoque ipsius altaris jam mortuum Christum Nicodemus et Joseph de cruce deponunt, ubi etiam hoc est descriptum Descensio Domini nostri Jesu Christi de cruce Hinc per XV gradus in ecclesiam descenditur et ad capellam, quæ Golgatha vocatur, reverendam quidem, sed obscuram pervenitur, retro quam fenestra profunda exstat, quæ finem scissuræ, quæ Calvariâ illo descenderat, intuentibus demonstrat In quo loco sanguis Christi, qui per scissuram illuc cucurrerat, restitisse perhibetur Præterea super arcum ipsam Golgatham concludentem vel in latere Calvariæ versus occidentem constituto tabula quædam in pariete depicta perspicitur, in qua bi versus aureis litteris descripti esse videntur.

‘Est locus iste sacer, sacratus sanguine Christi
Per nostrum sacrare sacro nihil addimus isti
Sed domus huic sacro circumsuperædificata
est quinta decima quintilis luce sacrata
cum reliquis patribus a Fulcherio patriarcha

Ante fores ecclesiæ inter duas januas Dominus Christus reverendo habitu quasi jam a morte resurgens consistit, ad cujus pedes Maria Magdalena prostrata, non tamen ipsos pedes tangens, jacet, cui Dominus chirographum porrigit hos versus continens.

‘Quid, mulier, ploras?
Jamjam quem quæris, adoras
Me dignum recoli,
quem jam vivum tu modo tangere noli

‘Exeuntibus ecclesiam versus meridiem occurrit quasi quoddam prætorium quadrangulum, quadratis lapidibus constructum, ad cujus sinistram partem juxta Golgatha exterius capella trium Mariarum in honore habetur, quam Latini tenent. Ulterius quoque ad meridiem alia capella exstat, cui præsunt Armenii Inde ulterius parvula quædam existit capella. In exitu vero ejusdem planitiei ad sinistram platea testudinata occurrit rebus referta venalibus A fronte ecclesiæ ipsum forum venalium rerum se repræsentat In qua fronte sex columnæ superius arcuatæ consistunt, ubi ex templo versus meridiem ecclesia et hospitale beati Johannis Baptistæ offertur Quæ quantis ædificiis decorata, quantis domiciliis et lectulis atque aliis utensilibus in usus pauperum et infirmorum atque debilium exhibendis abundans, quam in substantia pauperum recreationibus impendenda locuples, quam in egenorum sit sustentatione sollicita, nullus alteri verbis fidem posset facere, nisi ipse propriis hoc oculis valeret deprehendere, siquidem transeuntes per palatium numerum simul accumbentium nullo modo quivimus discernere, lectorum vero numerum millenarium vidimus excedere Nec enim quisque regum vel tyrannorum præpotens tantos, quantos illa domus, quotidie posset sustentare Nec mirum Nam præter ea, quæ in exteris possident terris, quorum non est facile numerus comprehendi, omnes fere civitates et villas ad Judæam quondam pertinentes a Vespasiano et Tito destructas cum universis agris et vinetis tam ipsi, quam templum

sibi subjugaverunt, disposita per universam regionem militia et castris adversus pagano valde munitis Post hoc ad orientem stanti sequitur ecclesia beatæ Mariæ, in qua sanctimoniales sub abbatissa constitutæ divinas quotidie celebrant laudes Qui locus idcirco beatæ Mariæ dicatus esse dicitur, quia, dum salvator noster ad passionem ductus male tractaretur, ipsius jussu in eodem loco, cenaculo quondam, quod tunc ibidem exstitit, inclusa fuisse perhibetur Item sequitur confestim alia ecclesia ad orientem posita, quæ similiter dominæ nostræ exstat articulata, eo quod, cum Dominus noster tantum supplicium pro nostra salute pateretur, ipsa, spasmo affecta præ doloris magnitudine, manibus ferentium eam illuc in subterraneum specum perlata est, ubi dolori suo satisfaciens capillos capitis sui evellebat, qui adhuc in ipsa ecclesia in ampulla vitrea conservantur Est etiam in ipsa ecclesia caput beati Philippi apostoli auro valde decoratum et brachium sancti Simeonis apostoli brachiumque sancti Cypriani episcopi Monachi in eadem ecclesia sub regula et abbatis imperio ibidem Deo deserviunt

'Hinc ad meridiem reflexo aliquantulum calle, per speciosam portam templi ad ipsum templum Domini pervenitur, per mediam fere civitatem transeundo, ubi de inferiore atrio ad superius ascenditur gradibus viginti duobus, et de superiori atrio intratur in templum Ante ipsos vero gradus in atrio inferiori gradibus XXV vel amplius in piscinam grandem descenditur, ex qua, ut fertur, per subterraneum specum usque ad ecclesiam sancti sepulchri transitur in tantum, quod ecclesiâ in sabbato sancto ignem cœlitus accensum per ipsum specum ad templum Domini deferri referatur In ipsa autem piscina hostiæ ad templum Domini debebant offerri, secundum legis mandatum lavabantur Atrium autem exterius duplum vel paulo plus majus est atrio interiori, cujus, sicut exterioris, pavimenta latis et magnis lapidibus constrata sunt Permanent autem adhuc duo latera atrii exterioris, alia duo in usus cesserunt canonicorum et templariorum In ipsis enim domos et hortos constituerunt Ab occidentali latere duobus ordinibus graduum in atrium superius ascenditur et meridiano similiter Super gradus autem, ante quos piscinam divimus esse sitam, quatuor columnæ arcuatæ consistunt, ubi etiam sepulchrum divitis cujusdam viri, ferreis cratibus circumseptum, ex alabastro decenter incisum consistit Ad dextram quoque super meridianos gradus similiter quatuor columnæ exstunt arcuatæ, ad sinistram vero tres Ad orientem nihilominus XV duplices gradus exstunt, per quos de aurea porta ascenditur in templum, secundum quos psalmista XV composuit psalmos, super quos quoque consistunt columnæ Ad meridianam præterea plagam super duos angulos atrii interioris duæ consistunt domunculæ, quarum una versus occidentem posita scholæ dicitur fuisse beatæ Mariæ Inter templum quoque et duo latera atrii exterioris, orientale scilicet et meridianum, lapis magnus situs est in modum altaris, qui secundum quorundam traditiones os est piscinarum ibidem consistentium, secundum aliorum vero opinionem Zachariam, Barachiæ filium, ibidem peremtum fuisse designat Ab aquilonali autem parte claustrum et officinæ exstunt clericorum Circa ipsum vero templum grandes piscinæ sub pavimento exstunt Inter aream quoque portam et XV gradus grandis piscina vetus et collapsa exstit, in qua antiquitus hostiæ diluebantur offerendæ

'Ipsum denique templum inferius octogonum esse manifestum est, inferius usque ad medium spatium nobilissimo marmore ornatum et a medio usque ad superiorem, cui tectum incumbit, limbum musivo opere decentissime decoratum. Ipse vero limbus, circulariter per totum templi ambitum circumductus, hanc continet scripturam, quæ, a fronte vel ab occidentali introitu inchoans, secundum solis circuitum sic est legenda, in fronte Pax æterna ab æterno patre sit huic domui, in secundo latere Templum Domini sanctum est Dei cultura

est. Dei sanctificatio est; in tertio latere Hæc est domus Domini firmiter ædificata, in quarto latere In domo Domini omnes dicent gloriam, in quinto Benedicta gloria Domini de loco sancto suo, in sexto. Beati, qui habitant in domo tua, Domine, in septimo Vere Dominus est in loco suo sancto, et ego nesciebam, in octavo. Bene fundata est domus Domini super firmam petram Præterea versus orientem juxta beati Jacobi ecclesiam columna quædam musivo opere in muro depicta est, supra quam talis est descriptio facta Columna romana Superior autem murus angustiori circulo, fornicibus interius sustentatus, circumducitur, qui, plumbeum gestans tectum, in summo grandem pilam et super eam crucem deauratam habet stantem Per quatuor januas intratur et exitur, unaquæque janua suam de quatuor mundi plagis respicientem. Subsistit autem ipsa ecclesia quadratis fornicibus VIII, columnis XVI, cujus muri et cœlatura musivo opere nobiliter sunt decorata Ambitus vero chori quatuor habet fornices sive pilaria et octo columnas, quæ interiorem murum, cum ipsius testudine in altum porrecta, gestant Super ipsos autem chori arcus linea in circuitu circulariter porrigitur hanc ex ordine continens scripturam Domus mea domus orationis vocatur, dicit Dominus In ea omnis, qui petit, accipit, et qui quærit, invenit, et pulsanti aperietur Petite et accipietis, quærite et invenietis In superiori vero circulo similiter circumducto hæc continetur scriptura Audi, Domine, hymnum et orationem, quam servus tuus orat coram te, Domine, ut sint oculi tui aperti et aures tuæ intentæ super domum istam die ac nocte Respice, Domine, de sanctuario tuo et de excelso cœlorum habitaculo In introitu proinde chori altare in honore beati Nicolai habetur ferreo pariete inclusum superius limbum habente et hanc scripturam continente, in fronte Anno millesimo C° 1°, indicta quarta, epacta XI, in sinistro latere Ab Antiochia capta LXIIII Jerusalem LXIII, in dextro latere Tripolis LXII Berytus LXI Ascalona XI anni Verum versus orientem ad latus chori locus ferreo pariete januas habente circumseptus omni veneratione dignus habetur, in quo Dominus noster Jesus Christus, ad templum cum oblatione sua XL° nativitatis suæ die delatus, a parentibus oblatus est, quem ad templi ipsius introitum senex Simeon in ulnas suscepit et ad locum oblationis detulit, in cujus loci fronte hi versus sunt descripti

'Hic fuit oblatus rex regum virgine natus.
Quo locus ornatur, quo sanctus jure vocatur.

Juxta eundem locum vix uno remotus cubito lapis ille situs est, quem Jacob patriarcha supposuerat olim capiti suo, super quem dormiens scalam ad cœlos vidit erectam, in qua descendentes et ascendentes angelos vidit, et dixit Vere Dominus est in loco isto, et ego nesciebam In cujus loci fronte isti continentur versus

'Corpore sopitus, sed mente Jacob vigil intus
hic vidit scalam, titulum direxit ad aram.

'Hinc per orientalem portam ad capellam beati Jacobi apostoli, fratris Domini, intratur ubi idem, de templi pinna præcipitatus et, fullonis fuste cerebro confracto, ab impiis Judæis peremtus, primo in valle Josaphat templo contigua sepultus et postea a fidelibus in eundem locum relatus honorifice, ut eum decuit, sepulturæ traditus est, super cujus sepulchrum hoc scriptum est epitaphium

'Dic, lapis et fossa: Cujus sunt, quæ regis ossa?
Sunt Jacobi justi Jacet hic sub tegmine busti

Est autem ipsa ecclesiola rotunda, inferius latior, superius angustior, columnis VIII sustentata et picturis optime decorata. Redeuntibus ab ipsa etiam per eandem portam, retro ostium ipsius portæ, ad sinistram quadrangulus quidam occurrit locus in lato et longo quinque habens pedes, in quo Dominus stans et ubi esset interrogatus in Jerusalem, quam in medio orbis sitam asserunt esse, respondit et hoc. Locus ille Jerusalem appellatur. Item retro idem ostium e regione prædicti loci seu versus aquilonem alius occurrit locus illas continens aquas, quas Ezechiel propheta vidit de templo a latere dextro. Redeuntibus in ecclesiam majorem ad meridiem juxta chorum, immo sub ipso choro ostium paret, per quod gradibus fere XLV in cryptam intratur, ubi scribæ et pharisæi mulierem in adulterio deprehensam adduxerunt ad Dominum Jesum eam accusantes, cui prius magister peccata remisit et a condemnatione liberavit. Quo exemplo peregrinis indulgentia ibidem dari solet. Habet autem ipsa ecclesia fenestras inferius XXXVI, superius XIIII, quæ simul junctæ faciunt quinquaginta, et est in honore nostræ dominæ sanctæ Mariæ consecrata, cui etiam principale altare articulatum est. Ipsa quoque ecclesia a beata Helena regina et ejus filio Constantino imperatore fertur esse fundata. Videamus ergo, quoties vel a quibus ipsum templum ædificatum fuerit sive destructum. Sicut legitur in libro Regum, primus rex Salomon templum Domini divina missione magnis impensis ædificavit, non rotundum, uti nunc conspicitur, sed oblongum, quod usque ad tempora Sedechiæ, regis Judæ, permansit, qui captus a Nebuchadenasor, rege Babyloniorum, in Babyloniam captivus adductus est, et cum eo Juda et Benjamin captivati similiter in terram Assyriorum translati sunt. Mox Nabuzardan, princeps coquorum ipsius, in Jerusalem cum exercitu veniens templum et civitatem ipse cremavit, et hæc prima ejusdem templi fuit eversio. Post LXX autem captivitatis annos reversi ad terram Juda filii Israel, ducibus Zorobabel et Esdra, cum favore et permissione Cyri, Persarum regis, idem templum in eodem loco reædificaverunt et, quoad melius potuerunt, ornaverunt. In reædificando autem templo et civitate una, ut fertur, manu lapides, alia propter gentilium circummanentium assiduas infestationes gladios tenebant. Hæc ergo secunda fuit templi reædificatio. Postea eadem civitas, ut in gestis Machabæorum legitur, ab Antiocho, rege Syriæ, etsi non penitus, tamen ex maxima parte vastata est, ornatus templi penitus destructus, sacrificia prohibita, muri diruti et quasi in solitudinem tam civitas, quam templum redactum est. Quod postea Judas Machabæus et fratres sui cum adjutorio divino, fugato Antiocho ejusque ducibus de Judæa propulsis, reædificaverunt et renovaverunt, et reparato altari sacrificia et oblationes, sicut prius, sacerdotibus dispositis instituerunt. Hæc quoque templi tertia fuit restitutio, quæ usque ad tempora permansit Herodis, qui, ut Josephus refert, contradicentibus licet Judæis, hoc templum solo dejiciens majori et sumptuosiori opere aliud instituit. Et hæc quarta templi reædificatio fuit, quæ etiam usque ad tempora Vespasiani et Titi perduravit, qui, expugnata omni provincia, tam civitatem, quam templum funditus everterunt. Et hæc quarta templi fuit eversio. Post hoc, ut paulo ante dictum est, hoc templum, quod nunc videtur, ad honorem Domini nostri Jesu Christi ejusque piæ genitricis ab Helena regina et ejus filio, imperatore Constantino, constructum est. Et hæc etiam quinta templi fuit restitutio.

'Sequitur ad meridiem palatium Salomonis, quod, in modum alicujus ecclesiæ oblongum et columnis interius sustentatum, nec non in fine sanctuarii similitudine circulariter ductum et magna atque rotunda testudine elatum, in speciem, ut diximus, ecclesiæ est formatum. Hoc cum omnibus appenditiis suis in proprietatem cessit militum templariorum, qui, in eo et in aliis domibus ad ipsum pertinentibus commanentes et arma, vestes et cibaria habentes reposita, ad custodiendam provinciam atque tuendam semper invigilant. Habent etiam sub se stabula equorum ab ipso rege quondam ædificata, ipsi palatio contigua mirandi operis varietate

perplexa, fornicibus erecta, arcubus et testudinibus multiplicitei variata, quæ secundum nostram æstimationem X milha equorum cum eorum custodibus posse capere testati sumus Denique a fine usque ad finem ipsius ædificii in longo et lato balearı arcu semel emissa sagitta nemo posset pertingere Superius domibus, solariis et ædificiis cunctis utilitatibus aptis multiformiter abundat, superne vero deambulantibus viridariis, prætoriis, vestibulis, consistoriis et pluviarum receptaculis in replendis cisterms exuberat, inferius vero lavacris, horreis, granariis, lignorum receptaculis ac cæteris necessitatum provisionibus superexcellit Ex alia ipsius palatii parte seu ad occidentem novam templarii domum constituerunt, cujus altitudinem, longitudinem, latitudinem, cellaria, refectoria, gradus et tectum, præter illius terræ morem, alto culmine elatum, etsi ego possem referre, auditor vix posset credere Nam novam ibi constituerunt curiam, sicut ex alia parte habent antiquam Novam etiam ibidem ad latus atrii exterioris miræ magnitudinis et operis condunt ecclesiam Quantæ autem vires et divitiæ sint templariorum, non facile quisque valet nosse Nam omnes fere civitates vel villas, quibus olim tota locupletabatur Judæa, quæ a Romanis erant destructæ, tam ipsi, quam hospitarii, constitutis ubique castellis et militibus in iis dispositis, sibi subjugaverunt, præter plurimas et infinitas possessiones, quas in exteris terris habere noscuntur.

'Et civitatis quidem murus a parte meridiana et orientali omnes eorum ambit habitationes, ab occidentali vero et aquilonali murus a Salomone factus tam eorum habitacula, quam et atrium exterius et ipsum circuit templum, ad aquilonalem vero atrii partem ex reliquiis Antoniæ ab Herode factæ unus cum una porta remansit paries Ipse autem collis, in quo templum situm est, Moria antiquitus vocabatur, in quo rex David angelum Domini vidit stantem et evaginato gladio populum cædentem, quando ad Dominum dixit Ego sum, qui peccavi, ego inique egi, obsecro, ut in me vertas manus et domum patris mei, isti, qui oves sunt, quid fecerunt? In hoc colle area fuit Areuna Jebusæi, quam ad constructionem domus Domini ab eo emit David Hinc per quoddam posticum angusta via inter murum orientalem civitatis et hortum templariorum transitur et ad venerabilem ecclesiam, quæ ad balneum sive ad præsepe Domini salvatoris dicitur, pervenitur Ibi cunæ Domini Christi versus orientem in edito muro ante quamdam fenestram honorifice dispositæ reverentur, ad meridiem vero concha lapidea grandis in terra posita videtur, in qua balneorum usus infans ipse habuisse dignoscitur, ad aquilonalem vero partem lectus dominæ nostræ, in quo, dum filium sinu lactaret, decubuisse ostenditur In hanc ecclesiam L fere gradibus descenditur, quæ etiam quondam domus justi Simeonis fuit, in qua ipse in pace quiescit

'Ab ipsa ecclesia sive ab ipso civitatis angulo versus meridiem per declivum montis latus secus antemurale, quo templarii domos et curiam suam munierunt, ubi etiam antiquitus ipsius civitatis erat positio, puta ad natatoriam Siloe via dirigitur, quam idcirco, sic fertur, vocaverunt, quod a monte Silo occultis meatibus aquæ fontis illius illuc soleant illabi Quod mihi ideo est in ambiguo, quia et noster mons, in quo civitas est sita, et alii interjacent montes, nec recto tramite vallis quælibet ab ipso monte ad eam dirigitur, nec propter remotionem locorum tanti montes cavari possent Distat enim mons Silo a civitate milliaribus duobus Hoc ergo in medio relinquentes, ea, quæ vera esse novimus, auditoribus proponamus. Hoc pro vero fatemur, quod in fontis modum de terra scaturiat, qui scilicet fons ipsam replens piscinam et in aliam juxta positam descendens non ultra comparet. Descenditur autem in ipsam piscinam gradibus XIII, ubi in circuitu fornices arcus gestantes consistunt, sub quibus magnis lapidibus per circuitum deambulatorium factum est, super quod consistentes interius decurrentes haurire valeant aquas Alia autem piscina quadrangula simplici muro circumdata est Ista natatoria olim erat intra civitatem, modo ab ea longe

remota est; nam duplo fere tantum hic civitati demtum est, quantum circa sepulchrum Domini additum est

'Nunc igitur secundum Christi passionis ordinem nostræ narrationis nos oportet dirigere sermonem, qui per suam gratiam ita nobis ei donet compati, ut ei possimus conregnare Milliario ab Hierosolymis Bethania, ubi domus Simonis leprosi, Lazari et ejus sororum Mariæ et Marthæ erat, distat, ubi Dominus sæpe hospitari solebat Sita est autem Bethania juxta vallem Oliveti, montem a parte orientali terminantem A Bethania ergo in die palmarum dilectissimus Dominus noster Jesus Christus præcedens et Bethphage veniens, qui locus inter Bethaniam et montem Oliveti medius est, ubi etiam honesta capella in ipsius honore est fabricata, binos ad adducendam asinam et pullum misit discipulos, et stans super lapidem grandem, qui in ipsa capella manifeste videtur, et asino insidens per montem Oliveti Hierosolymam properavit, cui turba multa in descensu montis ipsius obviam processit. Ipse vero progrediens ultra vallem Josaphat et torrentem Cedron ad auream portam, quæ duplex est, pervenit In cujus adventu una porta, excusso pessulo, per se illi patuit, alteram vero, extracto violenter ejus circulo, cum sonitu magno patere fecit quapropter ibidem capella in ejus honore consecrata est, ubi idem circulus deauratus in magna veneratione habetur Ipsa vero porta nunquam nisi in die palmarum et in exaltatione sanctæ crucis solet aperiri, pro eo, quod Heraclius imperator cum magna ipsius ligni portione, quod de Perside adduxerat, per eam transivit Ipse autem in templum intrans in eo quotidie usque ad feriam quartam erat docens

'Cum eo igitur in montem Sion cupio ascendere et quid post hæc fecerit, videre, sed prius cum Petro volo incarcerari, ut cum eo a Christo docear non negare, sed orare In via quippe de templo provenientibus ad montem Sion decora occurrit capella, in qua carcer ille profunda altitudine sub terra positus, utpote ad quem XX et amplius gradibus intratur, habetur, in quo Herodes Junior sanctum vinxerat Petrum, de quo eum angelus Domini eduxit In introitu ipsius capellæ isti sunt versus descripti

'Vestibus indutus, Petre, surge, recede solutus
Namque catenarum sunt vincula rupta tuarum
Nunc scio re certa, cum porta mihi sit aperta
O pietas Christi, quoniam me salvificasti

'Sion ergo mons, ad meridiem extra muros civitatis ex maxima parte constitutus, ecclesiam dominæ nostræ sanctæ Mariæ articulatam, muris, turribus, propugnaculis adversus gentilium insidias valde munitam continet, in qua regulares præpositum habentes Deo deserviunt. Quam dum intraveris, in media absidе ad sinistram locum illum venerabilem reperies marmore pretioso exterius et opere musivo interius decoratum, in quo Dominus noster Jesus Christus dilectæ matri suæ, dominæ nostræ sanctæ Mariæ, animam assumens ad cælestia transtulit Quod opus inferius quadratum est, superius vero rotundum gestat ciborium A dextris autem gradibus fere XXX ad illud ascenditur cœnaculum, quod in fine absidis situm est in quo mensa cernitur, in qua ipse Dominus noster cum discipulis suis cœnavit, et post proditoris abscessum ipsis discipulis corporis et sanguinis sui mysteria tradidit Ab illo loco ad meridiem in eodem cœnaculo ultra spatium XXX pedum altare habetur in eo loco, ubi spiritus sanctus super apostolos venit Abhinc tantum inferius per gradus descenditur, quantum huc est ascensum, et in capella ipsi cœnaculo supposita concha illa lapidea in muro posita videtur, in qua salvator pedes apostolorum in eodem loco lavit, ubi juxta ad dextram

altare habetur in loco, ubi Thomas latus Domini post resurrectionem palpavit, qui pro hoc ipso digitus appellatur Ex hoc per quoddam vestibulum circa ipsius ecclesiæ sanctuarium transitur et ad sinistram ejus altare venerandum habetur, sub quo corpus beati Stephani protomartyris a Johanne, episcopo hierosolymitano, sepultum fuisse non dubitatur, quod postea a Theodosio imperatore Constantinopoli Romam translatum esse legitur, quod etiam primo de Hierosolyma Constantinopolim ab Helena regina perlatum esse fertur Ante chorum quædam pretiosi marmoris columna juxta murum posita est, quam simplices homines circummigrare solent.

'Hinc post cœnam suam Dominus trans torrentem Cedron egressus est, ubi erat hortus Torrens Cedron per mediam vallem Josaphat graditur In loco autem, ubi hortus ille fuit, ecclesia beatæ Mariæ cum suis officinis constituta est, ubi ipsa corporaliter fuit sepulta Intratur vero per quamdam porticum gradibus amplius quam XL in cryptam, in qua sanctum ejus exstat sepulchrum, quod opere pretiosissimo de marmore et opere musivo decoratum est In hujus cryptæ introitu hi duo versus appositi sunt

'Hæredes vitæ, dominam laudare venite,
per quam vita datur mundique salus reparatur

Quod in circuitu XX columnis arcus gestantibus circumdatum limbum in circuitu et tectum desuper habet In ipso autem limbo hi quatuor versus descripti sunt

'Hic Josaphat vallis, hinc est ad sidera callis
In Domino fulta, fuit hic Maria sepulta.
Hinc exaltata cœlos petit inviolata·
spes captivorum, via, lux et mater eorum

Super tectum quoque ciborium rotundum sex duplicibus columnis fultum cum pila et cruce deaurata desuper habet, et inter duas columnellas undique lampas dependet. Ad ipsum autem sepulchrum a parte occidentali intratur et per aquilonalem exitur. Assumtio autem ipsius in cœlatura superius optime depicta est sub recta linea hanc scripturam continente Assumta est Maria in cœlum gaudent angeli et collaudantes benedicunt dominam Circa sanctuarium quoque ipsius basilicæ regula porrigitur hanc continens scripturam Exaltata est sancta Dei genitrix super choros angelorum ad cœlestia regna Abhinc in ipsam ecclesiam tantis ascenditur gradibus, quantis in cryptam descensum est Est autem ipsa ecclesia et omnes ejus officinæ muris altis, turribus firmis et propugnaculis adversus gentilium insidias valde munita, circa se plurimas habens cisternas Exeuntibus ipsam cryptam ad sinistram capella parvula in ipsis sita gradibus occurrit In ipsa quoque ecclesia Syriani proprium habent altare In cœlatura quoque, quæ ipsis gradibus, quibus in ipsam cryptam descenditur, incumbit, migratio dominæ nostræ cernitur esse depicta, ubi dilectus filius ejus, Dominus noster Jesus Christus, cum multitudine angelorum assistens et ejus animam suscipiens ad cœlesta transfert, apostolis gemituose adstantibus et devotum ei ministerium exhibentibus Cujus corpori sanctissimo feretro imposito dum superpositum velamen vellet quidam Judæus avellere, angelus utrasque manus ei gladio amputavit, quibus in terram cadentibus truncі in corpore remanserunt manes fertur enim quia, cum ipsa domina nostra migrasset de corpore in monte Sion, ut in anterioribus dictum est, et sancti apostoli sanctissimum corpus ipsius feretro reverenter impositum in valle Josaphat tumulandum per viam extra muros civitatis versus orientem tendentem ducerent, Judæi, nondum sopita invidiæ et odii flamma, quam

dudum in eam ejusque filium exercuerant, ut ei aliquid ignominiæ inferrent, occurrerant, quorum unus, audacior ac cæteris infelicior, ad sancti corporis gestatorium accedens velamen ei superpositum ausu improbo nisus est avellere, sed hanc ejus temeritatem et beatæ virginis Mariæ merita et ultio divina graviter mulctaverunt. Nam utrisque manibus et brachiis arefactis, cæteris non sine horrore velocem fugam incussit

'Progresso deinde versus montem Oliveti ad meridiem non modica tibi occurrit ecclesia, Gethsemane nuncupata, ubi salvator, cum discipulis suis ab horto veniens, intravit et ad eos dixit Sedete hic, donec vadam illuc et orem Ingressus itaque in eam statim invenies altare venerandum, et ad sinistram in subterraneum specum ingrediens quatuor loca invenies denotata, in quibus singulis terni apostoli cubantes obdormierunt Est etiam ad sinistram saxum grande in ipsius specus angulo, in quod ipse Christus digitos imprimens sex in eo fecit foramina Et ipse avulsus est ab iis, quantum jactus est lapidis Nam paulo altius versus montem Oliveti, ad meridiem, trinam fecit orationem, in quo loco nova nunc ædificatur ecclesia Est vero unus locus unius orationis in abside sinistra, alius in medio chori, tertius in abside dextra Inter Gethsemane autem et loco orationum medio spatio, in latere montis Oliveti, ubi turbæ Domino cum ramis palmarum occurrerunt, ex lapidibus locus altus factus est, in quo in die palmarum a patriarcha palmæ benedicuntur Circa hæc itaque loca, cum Jesus paveret et caderet, adveniens Judas cum laternis et facibus et armis et ministri Judæorum comprehenderunt eum et angariaverunt et ad atrium principis sacerdotum seu Caiphæ perduxerunt Quem cum tota nocte illusissent, mane eum judici Pilato præsentaverunt

'Quem post multas interrogationes cum eo habitas ad locum judiciarium duci fecit et sedit pro tribunali in loco, qui vocatur Lithostrotos, qui locus ante ecclesiam beatæ Mariæ in monte Sion in edito versus civitatis murum situs est ubi capella venerabilis in honore Domini nostri Jesu Christi habetur, in qua pars magna columnæ exstat, circa quam ligatus Dominus a Pilato, postquam crucis appensioni ab eo adjudicatus est, jussus est flagellari, ubi peregrini ad ejus exemplum flagellari solent Ante ipsam vero ecclesiam in lapide ad crucis similitudinem facto hæc scriptura exarata est Iste locus vocatur Lithostrotos, et hic Dominus fuit judicatus Dehinc versus orientem ad dextram, ex alia parte plateæ, gradibus L descenditur in ecclesiam Galilæa nuncupatam, ubi duo circuli catenæ, qua beatus Petrus erat vinctus, habentur. Deinde ad sinistram altaris partem LX fere gradibus descenditur in subterraneum specum obscurissimum, in quem Petrus fugiens post negationem in ejus angulo latuit Ibi enim depictus est residens et caput in manibus declinans pii magistri incommoda et suam deflet negationem, ancilla ei minaciter instante et gallo ante ejus pedes stante et canente Hunc ecclesiæ præsunt Armenii Hinc Dominus, per civitatis murum circumductus, in Calvariam, ubi tunc horti habebantur, nunc domus habentur, ductus et crucifixus est Nam, sicut apostolus ait, Dominus extra portam passus est

'Et de Christo quidem et ejus locis ea, quæ visu didicimus, pro posse narravimus Nunc quædam de ejus amicis et aliis locis nota referemus Post hoc quædam a nobis visa, quædam ab aliis nobis relata dicemus.

'Juxta viam, quæ ducit ad portam orientalem auream portæ vicinam secus domum vel palatium Pilati, quam eidem viæ contiguam esse supra diximus, ecclesia beatæ Annæ sita est matris dominæ nostræ sanctæ Mariæ, ad cujus sepulchrum in subterraneum specum gradibus descenditur fere XX Sanctimoniales in ea sub abbatissa Deo deserviunt Ad cujus aquilonalem partem qui progreditur, in valle profunda, juxta lapidosum quemdam collem, cui vetus quoddam opus incumbit, piscinam probaticam inveniet, quæ, sicut in evangelio scribitur,

quinque porticus habet, in cujus ultima altare constitutum est Quicunque muros circuit civitatis a turri David itineris initium faciens, juxta angulum occidentalem ecclesiam et habitacula leprosorum ornata et bene ordinata reperiet Pertransiens autem cisternam grandem hospitariorum, antequam venias ad portam aquilonalem, ecclesia beati Stephani protomartyris in colle sita tibi occurrit, qui, per ipsam portam ejectus et a Judæis lapidatus, cœlos ibidem vidit aperte Est autem in ipsa ecclesia media locus gradibus elatus, parete ferreo septus, in cujus medio altare venerandum et cavum habetur, ubi locus lapidationis ejus fuit et cœli super eum apertionis Hæc ecclesia abbati sanctæ Mariæ in Latina subjacet In ipsa vero porta hospitale venerandum habetur, quod græce xenodochium vocatur Per ipsam quoque viam cum aliquamdiu transieris, ad sinistram viam carpens, versus orientem, ecclesiam quamdam, quam tenent Armenii, reperies, in qua quidam sanctus, nomine Charitон, requiescit, cujus ossa, ac si viverent, carne teguntur

'Post hæc, cum tempus et hora dominicæ ascensionis instaret, conscenso Dominus monte Oliveti stans super lapidem grandem, videntibus apostolis ejusque benigna dignatione benedictis, cœlos ascendit Est autem mons Oliveti, ut in anterioribus dictum est, omnibus circumpositis civitati montibus eminentior, omnium fructuum proventibus abundans, in cujus summo cacumine ecclesia summæ venerationis honori ipsius salvatoris articulata continetur Nec enim locis ipsius Domini præsentia illustratis alia consecratio in partibus illis adhiberi solet præter ipsam certe montis altitudinem In ipsam ecclesiam XX magnis ascenditur gradibus, in medio autem ipsius ecclesiæ opus quoddam rotundum magnifice pario marmore et cœruleo decoratum et alto culmine elatum existit, in cujus medio altare reverendum habetur, sub quo lapis ille videtur, in quo Dominus cœlos scandens stetisse perhibetur In ipsa vero ecclesia canonici officia divina peragunt Quæ et ipsa turribus magnis et parvis, et muris, propugnaculis et nocturnis custodiis valde adversus gentiles exstat munita Exeuntibus de ipsa ecclesia versus occidentem ecclesiola subterraneo specu tenebrosa occurrit, in quem cum gradibus XXV fuerit descensum, in sarcophago grandi corpus beatæ Pelagiæ cernitur, quæ ibidem inclusa in divino servitio vitam finivit Item ad occidentem juxta viam Bethaniam tendentem, in latere montis Oliveti, magnæ reverentiæ habetur ecclesia, in quo loco residens salvator et a discipulis, qualiter orare deberent, interrogatus eos orare docuit dicens Pater noster, qui es in cœlis Hoc eis propria scripsit manu Hoc sub ipso altari scriptum est, ita ut illud peregrini osculari possint A medietate quoque ipsius ecclesiæ in subterraneum specum gradibus fere XXX descenditur, ubi Dominus sæpe residens discipulos docuisse perhibetur

'Quisquis per occidentalem urbis portam turri David contiguam exiens, reflexo versus meridiem calle, vallem Ennon duo civitatis latera cingentem juxta novam cisternam pertransierit

'Exeuntibus de sancta civitate versus occidentem per portam turri David contiguam ad dextram iter est ad quamdam capellam, in qua cum per gradus fere centum ad profundissimum et subterraneum specum fuerit descensum, innumerabilia reperiuntur corpora peregrinorum, qui hoc modo illuc devenisse feruntur Omnes, qui in uno anno ipso solemni causa orandi venerunt peregrini, civitatem Saracenis plenam reperierunt, et propterea intrare non valentes, nec recedere volentes, eos in civitate obsederunt Sed nec arma, nec escas ad tam arduam rem explendam sufficienter habentes, defectu necessariorum vehementer arctari cœperunt Et cum in defectu existerent, videntes Saraceni eos sibi non posse resistere, de civitate in eos subita eruptione omnes gladio interemerunt Ascendente autem de tot hominum corporibus œtore, omnia decreverunt ignibus exurere, ipsa autem nocte missus a Deo affuit leo, qui

omnia illa corpora in illum specum os angustum habentem projecit Illorum autem parva quælibet particula trans mare potest deferri, quin et, si carinis fuerit illata, naves sua sponte redire feruntur'

The following is from the 'Citez de Jherusalem,' written about the year 1187, A D It is of great value as giving the account of the mediæval churches in Jerusalem, the names of the streets, pools, etc, as in use among the Christians of the Middle Ages

'Pour ce que li plus des bonz crestienz parolent e oient volantierz parler de la sainte cité de Iherusalem, e des Sainz Leus ou nostre Sire fu morz et viz, nous dironz, commant ele seoit au jor, que li sarrazin et Salahadinz la conquistrent seur les chrestienz Aucunes gens porront estre qui le vorront oir, cil a qui il desplera, porront trespasser cest leu

'Iherusalem, la glorieuse citez, n'est pas en cel liu qu'ele estoit, quant Ihesu Cris estoit en terre ne il fu crucefiés ne il fu resuscités de mort a vie Quant Ihesu Cris estoit en terre, estoit la cités de Iherusalem sor le mont de Syon, mais ele n'i est ore pas. Il n'i a solement e une abeie de moines, e en cele abeie a un mostier de madame sainte Marie La u li mostiers est, si con on fait entendant, fu la maisons u Ihesus Cris cena aveques ses apostres le juesdi absolu, e fist le sacrement de l'autel En cel mostier est li lius u il s'aparut as apostres le jor de pasques, quant il fu resuscités En cel mostier est li lius u il mostra ses plaies de ses pies et de ses mains et de son costé a saint Thumas as octaves de pasques, e se li dist qu'il li baillast sun doit, e le boutast en son costé, si creist fermement, e noient ne se doutast, si ne fust mie mescreans, ains creist E la meismes s'aparut il le jor de l'ascension a ses apostres, quant il vint prendre congié a aus e il vot monter es cieus D'alec le convoierent il jusqu'el mont Olivet De la monta il es cieus Dont retornerent ariere en cel liu meisme e atendirent le saint espir, si con Ihesu Cris lor avoit dit e commandé qu'il retornassent ariere en la cité, si attendissent le saint espir qu'il lor avoit promis En cel liu lor envoia il la grasse del saint espir le jor de pentecoste En cel mostier meisme est le lius u madame sainte Marie trespassa en Galilée, e diluec le porterent li apostre enfoir el val de Josafas, e misent en un sepucre

'La u li sepucres madame sainte Marie est, a un mostier, c'on apele le mostier madame sainte Marie de Josafas, e si a une abeie de noirs moines Li mostiers de monte Syon si a a non li mostiers madame sainte Marie de Monte Syon, e si a une abeie de chanoines Ces II abeies sont defors les murs de la cité, l'une est el mont e l'autre est el val L'abeie de monte Syon est a destre de la cité en droit midi, e cele del val de Josaphat est vers solel levant entre mont Olivet e monte Syon

'Li mostiers del sepucre qui ore est e monte Calvaire, estoit, quant Ihesu Cris fu crucefiés, fors des murs Ore est en mi liu de la cité, e si est la cités auques en un pendant, e pent vers mont Olivet qui est vers solel levant desor le val de Josafas

'En Iherusalem a IIII maistres portes en crois, l'une en droit l'autre, estre les posternes Or les vos nomerai, e coment eles sient

'La porte David est vers solel couchant e est a la droiture de portes oires qui sont vers solel levant deriere le temple Domini Cele porte tient a la tor David, pour çou l'apele on la porte David Quant on est en cele porte, si torne on a mien destre en une rue Par devant la tor David si puet on aler en monte Syon par une posterne qui la est En cele rue,

a main senestre ains c'on isse hors de la posterne, a un mostier mon segnor Jaque de Galisse qui frere fu mon segnor saint Jehan evangeliste. La dist on que sains Jaques ot la teste copee Por çou fist on la cel mostier

'La grans rue qui va de la porte David droit a portes oires, cele rue est apelee desi c'al cange la rue David A main senestre de la toi David a une grant place u on vent le blé, e quant on a un poi avalé cele rue qui a a non la rue David, si trueve on une rue a main senestre qui a a non la rue le patriarche, poi çou que li patriarches maint al cief de cele rue E a main destre de le rue le patriarche a une porte, par la u on entre en la maison de l'ospital Apres si a une porte, par la u on entre el mostier del sepucre, mais n'est mie la maistre porte

'Quant on vient al cange, la u la rue David faut, si trueve on une rue qui a a non la rue de monte Syon, car cele rue vait a la porte monte Syon E a senestre del cange a une rue tote coverte a vote qui a a non la rue des herbes La vent on tot le fruit de le vile e les herbes e les espisses Al cief de cele rue a un liu, la u on vent le poisson, e deriere le marcié, la u on vent le poisson, a une grandisme place a main senestre, la u on vent les oes e les fromages e les poles e les awes A main destre de cel marcié sont les escopes des orfevres suriens, e si vent on les paumes que li paumier apportent d'outre mer A main senestre de cel marcié sont les escopes des orfevres latins Al cief de ces escopes a une abeie de nonains, c'on apele sainte Marie le grant Apres cele abeie de nonains trueve on une abeie de nomes moirs, c'on apele sainte Marie le latine Apres trueve on le maison de l'ospital La est la maistre porte de l'ospital

'A main destre de la droiture de l'ospital est la maistre porte del sepucre Devant cele porte del sepucre a une moult bele place pavee de marbre A main senestre de cele porte del sepucre a un mostier, c'on apele saint Jake des Jacobins A main destre tenant de cele porte del sepucre a uns degres, par la u on monte en monte Calvaire Lasus, en som le mont si a une moult bele chapele, e si a un autre huis en cele chapele, par la u on entre e avale el mostier del sepucre par uns autres degiez qui la sont tot si com on entre el mostier A main destre desos monte Cauvaire si est Golgatas A main senestre est li clochiers del sepucre, e si a une chapele, c'on apele sainte trinité Cele chapele si est granz, car on i soloit espouser totes les femes de la cité, e la etoient li fons, la u on batisoit tos les enfans de la cité E cele chapele si est tenans al mostier del sepucre, si qu'il i a une port dont on entre el mostier

'A la droiture de cele porte est li monumens. En cel endroit, la u li monumens est, est li mostiers tos roons, e si est overs par desore, sans covertures E dedens cel monument est la piere del sepucre, e li monumens est tot covers a voute Al chavec de cel monument ausi com al cief a un autel par defors, qu'on apele le chancel La chantoit on cascun jor messe al point del jor Il a moult bele place tot entour le monument e tote pavee, si c'on va a procession tot entor le monument

'Apres vers oriant est li cuers del sepucre, la u li chanoine chantent Entre le cuer, la u li chanoine sont, e le monument a un autel, la u li griu chantent, mais qu'il a un enclos entre li e si a un huis, par la u on va de l'un a l'autre En mi liu del cuer as chanoines a un cru de marbre, c'on apele le compas, la sus list on l'epistre

'A main destre del maistre autel de cel cuer est monte Calvaire, si que, quant on chante messe de la resurrexion, li diacres, quant il list l'evangile, si se torne devers monte Cauvaire, quant il dist crucifixum, apres si se torne vers le monument e si dist surrexit, non est hic, apres le mostre al doit · ecce locus, ubi posuerunt eum, e puis se torne al livre, si parlist son evangile

'Al chavec del cuer a une porte, parla u li chanoine vont en lor offecines, e a main destre entre cele porte e monte Cauvaire a une parfonde fosse u on avale a degres La a une chapele, c'on apele sainte Elaine La trova sainte Elaine la crois e les clous e le martel e la corone En cele fosse, al tans que Ihesu Cris fu en terre, getoit on les crois, la u li laron avoient esté crucefié, e les membres qu'il avoient deservi a couper E por çou apele on cel mont monte Cauvaire, c'on i faisoit les justices e çou que la lois aportoit, e c'on i eschavoit les membres c'on lor avoit jugié a perdre

'Tot si comme li chanoine issent del sepuere, a main senestre estoit lor dortoirs, e a main destre estoit lor refroitoirs e tient a monte Cauvaire Entre ces ii offecines est lor clostres e lor prael En mi liu du prael a une grant overture, par u on voit en la chapele sainte Elaine qui desos est, car autrement n'i verroit on noient

'Or vos ai dit del sepuere, comment il est Or revenrai ariere al cange Devant le cange tenant a le rue des herbes a une rue, c'on apele mal cuisinat En cele rue cuissoit on les viandes c'on vendoit as pelerins, e si i lavoit on lor ciés, e si aloit on de cele rue al sepuere Tenant a cele rue del mal cuisinat a une rue, c'on apele le rue coverte La on vent le draperie, e est tote a voute par desus, e par cele rue va on al sepuere

'Or lairons del cange, si m'en irai a portes oires Cele rue dont on va del cange a portes oires, a a non le rue del temple Por çou l'apele on la rue del temple, c'on vient ainsçois al temple c'a portes oires A main senestre, si con on avale cele rue a aler a portes oires, est la bouchcrie, la u on vent la char de la vile A main destre a une rue, par la u on va a l'ospital des alemans Cele rue a a non le rue des alemans A main senestre sor le pont a un mostier de saint Gille. Al cief de cele rue a unes portes, c'on apele portes precieuses Por ço les apele on portes precieuses que Ihesu Cris entroit par ces portes en la cité de Iherusalem, quant il ala par terre Ces portes sont en i mur qui est entre le mur de la cité e portes oires

'Entre le mur de la cité e le mur des portes oires si est li temples, e si a une grant place qui plus a d'une traitte de lonc e le get d'une piere de lé, ains c'on vegne al temple Cele place si est pavee, dont on apele cele place le pavement Si com on ist de ces portes, a main destre est li temples Salemon, la u li frere del temple manoient A la droiture de portes precieuses e de portes oires est li mostiers del temple Domini, e si est en haut, si c'on i monte a degres. Quant on a monté ces degres, si trueve on le grant place tote pavee de marbre e moult est large, e cil pavemens va tot entor le mostier del temple Li mostiers del temple est tos roons A main senestre de cel haut pavement del temple est l'offecine de l'abé e des chanoines, e de cele part a uns degres, par la u on monte al temple del bas pavement el haut

'Devers solel levant tenant al mostier del temple a une chapele de mon segnor saint Jakome l'apostre, le menor Por çou est iluec cele chapele qu'il i fu martiriés, quant li jui le geterent de desor le temple a val Dedens cele chapele est li lius u Ihesu Cris delivra la pecheresse c'on menoit martirier, por çou qu'ele avoit este prise en avoutire, e il li demanda, quant il l'ot delivrée, ou cil estoient qui l'avoient acusée, e ele dist qu'ele ne savoit. Adonc li dist Dex qu'ele s'en alast e ne pechast mais

'Al cief de cel pavement, par devers solel levant, ravale on uns degres a aler a portes oires Quant on les a avalés, si trueve on une grant place, ains c'on vegne as portes La siest li atres que Salemons fist Par ces portes ne passoit nus, ains estoient murees, que il fois en l'an, c'on les desmuroit, e i aloit on a procession le jor de pasque fiorie, pour çou que Ihesu Cris i passa cel jor e fu recheus a procession, e le jor de sainte crois saltasse, por ço que par ces portes fu rapportee la sainte crois en Iherusalem, quant li empereres Eracles de

Rome le conquesta en Perse, e par cele porte le remist il en la cité e ala on a procession encontre lui Por çou c'on n'issoit mie hors de la vile par ces portes, avoit il une posterne par encoste, c'on apeloit la porte de Josafas Par cele posterne issoient hors cil de la cité de cele part, e cele posterne est a main senestre des portes oires

'Par devers midi ravale on del haut pavement del temple el bas dont on vait el temple Salemon A main senestre, si com on a avalé del haut pavement el bas, la a un mostier, c'on apele le berc La estoit li bers dont Dex fut berciés en s'enfance, si con on dist

'El mostier del temple avoit IIII portes en croix La premiere est devers solel couchant. Par la entroient cil de la cité el temple E par cele devers solel levant entroit on en la chapele saint Jaque, e si s'en issoit on d'ilueques a aler a portes oires Par la porte devers miedi aloit on el temple Salemon, e par la porte devers aquilon entroit on en l'abeie

'Or vos ai devisé del sepucre e del temple, coment il siet, e de l'ospital e des rues qui sont de la porte David dusc'a portes oires, l'une en droit l'autre, dont l'une est devers solel levant e l'autre devers solel couchant

'Or vos dirai des autres II portes dont l'une est en droit l'autre Cele devers aquilon a a non la porte saint Estevene Par cele porte entroient li pelerin en la cité e tot cil qui par devers Acre venoient en Iherusalem e par tote la terre deça le flun desci c'a le mer d'Escalone Dehors cele porte, ains c'on i entre, a main destre, avoit un mostier de mon segneur saint Estene La dit on que mes sire sains Estenes fu lapidés Devant cel mostier, a main senestre, avoit une grant maison, c'on apele l'asnerie La soloient jesir li asne e li somier de la maison de l'ospital, por çou avoit a non l'asnerie Cel mostier de saint Estene abatirent li crestien de Iherusalem devant çou qu'il fussent asegié, por ço que li mostiers estoit pres des murs L'asnerie ne fu pas abatue, ains ot puis mestier as pelerins qui par treuage venirent en Iherusalem, quant ele estoit de sarrasins Por ço que li sarrasin ne les laissoient mie herbergier dedens la cité, por ço lor ot la maisons de l'asnerie grant mestier A main destre de la porte saint Estene estoit la maladerie de Iherusalem tenant as murs Tenant a le maladerie avoit une posterne, c'on apeloit la posterne saint Lasdre La metoient li sarrasin les crestiens en la cite, por aler covertement al sepucre, que li sarrasin ne vouloient mie que li crestien veissent la faice de la cite, e les metoit on par la porte qui est en la rue le patriarche, el mostier del sepucre, ne ne les metoit on mie par le maistre porte.

'Quant on entre en la cité de Iherusalem par la porte saint Estene, si trueve on II rues l'une a destre qui vait a le porte monte Syon, qui est en droit midi, e la porte monte Syon si est a la droiture de la porte saint Estene La rue a main senestre si va droit a une posterne, c'on apele la posterne de la tanerie, e va droit par desos le pont

'Cele rue qui vait a le porte monte Syon, a a non la rue saint Estene desi c'on vient al cange des surïens Ainsçois c'on vegne al cange des surïens, a une rue a main destre, c'on apele le rue del sepucre La est la porte de la maison del sepucre, par la entrent cil del sepucre en lor manoirs

'Quant on vient devant cel cange, si trueve on a main destre une rue coverte a vote, par u on va el mostier del sepucre En cele rue vendent li surïen lor draperie e si fait on les chandeles de cire Devant cel cange vent on le poisson A cel cange tienent les III rues qui tienent as canges des latins, dont l'une de ces III rues a a non rue coverte. La vendent li latin lor draperie E l'autre a a non la rue des herbes e la tierce mal cuisinat Par la rue des herbes vait on en la rue monte Syon, dont on va a la porte monte Syon e trescope la rue David Par la rue coverte vait on en une rue par le cange des latins Cele rue apele on la rue del arc Judas, e trescope on la rue del temple, e cele rue va droit a le porte monte Syon

Cele rue apele on le rue del arc Judas, por ço c'on dist que Judas s'i pendi a un arc de piere A senestre de cele rue a un mostier, c'on apele le mostier saint Martin, e pres de cel mostier, a main senestre, a un mostier de saint Pierre La dist on que ce fu que Ihesu Cris fist le boe, qu'il mist es iex de celui qui onques n'avoit eu oil, e li commanda qu'il s'alast laver a le fontaine de Syloe, si veroit, e il si fist, si ot iex e si vit.

'Tot si com on ist hors de le porte monte Syon, si trueve on iii. voies une voie a main destre qui vait a l'abeie e al mostier de monte Syon Entre l'abeie e les murs de la cité si avoit un grant atre e i mostier en mi liu La voie a main senestre si vait selonc les murs de la cité tot droit a portes oires, e d'ilec avale on el val de Josafas, e si en vait on a la fontaine de Syloe E de cele porte a main destre sor cele voie a un mostier, c'on apele saint Piere en gallicante En cel mostier avoit une fosse profonde La dist on que sains Pieres se mucha, quant il ot Ihesu Crist renoié, e il oi le coc chanter, e la plora il. La voie a la droiture de le porte devers miedi si vait par desoz le mont desi c'on a passé l'abeie Quant on a passé l'abeie, si avale on le mont e vait on par la en Belleem

'Si tost c'on a avalé le mont, si trueve on i lai en la valee, c'on apele le lai Germain, car Germains le fist faire, por recoillir les ewes qui venoient des montagnes, quant il plovoit, e la abuvroit on les chevaus de la cité D'autre part la valee, a main senestre, pres d'ilueques a un charnier, c'on apele champ de mar La getoit on les pelerins qui moroient a l'ospital de Iherusalem Cele piece de terre u li charniers est, fu achetee des deniers dont Judas vendi la char Ihesu Cris, si con l'evangiles tesmoigne

'Dehors la porte David a un lai par devers solel couchant, c'on apele li lai del patriarche, la u on recueilloit les ewes d'iluec entor a abuvrer les chevaus Pres de cel lai avoit un charnier, c'on apeloit le charnier del lyon Il avint ja, si com on dist, a un jor qui passés est, qu'il ot une bataille entre cel charnier e Iherusalem, u il ot moult de crestiens ocis, e que cil de la cité les devoient lendemain faire tos ardoir por le puor, tant qu'il avint, c'uns lyons vint par nuit, si les porta tos en cele fosse, si com on dist E sus cel charnier avoit un mostier u on chantoit cascun jor messe

'Pres d'ilec a une lieue avoit une abeie de jorjans, la u on dist c'une des pieces de la crois fu coillue, e l'estache de la crois fu prise devant le temple, qu'ele estoit demoree dou temple, c'on ne pooit trover liu u ele s'aferist, qu'el ne fust u trop longe u trop corte Dont il avenoit, si com on dist, que, quant les gens venoient al temple e il avoient lor pies en boes, qu'il terdoient ilueeques lor pies Dont il avint c'une fois i passa une roine, si le vit enboee, si le terst de ses dras e si l'aora

'Or vos dirai de cele piece de fust dont ele vint, si con on dist el pais. Il avint chose c'Adans jut el lit mortel, si pria une de ses fix por Deu qu'il li aportast un ransel de l'arbre dont il avoit mangié del fruit, quant il pecha Il li aporta e il le prist, si le mist en sa bouche Quant il l'ot en sa bouche, il estrainst les dens, e l'arme s'en ala, n'onques cel rainsel ne li pot on esragier des dens, ains fu enfois atot Cis rainsiaus, si com on dist, reprist e devint bel arbre, e quant ce vint que li deluives fu, si esraga cis arbres e le mena li deluives el mont de Liban, e d'ilueques fu il menés en Iherusalem avec le mairien, dont li temples fu fais qui fu taillés el mont de Liban Il avint, si com on dist, que, quant Ihesu Cris fu mis en crois, que la teste Adan estoit dedans le boise, e quant li sans Ihesu Crist issi hors de ses plaies, la teste Adan issi hors de la boise e recoilli le sanc, dont il avient encore qu'en tos les crucefis c'on fait en la terre de Iherusalem, c'au pié de la crois a une teste en raimenbrance de celi

'Or vos dirai des jorjans qui sont en l'abeie u l'une partie de la crois fu prise, quels gens se sont, ne de quel terre il sont. La terre dont il sont, a a non Avegie, e si a roi e roine dont

aucunes gens apelent cele terre terre de Femenie Poi ce l'apelent terre de Femenie que la roine chevauce e tient s'ost de ses femes ausi com li rois fait de ses homes En cele terre n'ont les femes c'une mamele, e si vos dirai poi coi Quant la feme est nee e ele est un poi crute, si li cuist on la destre mamele d un fer chaut, e la senestre il laisse on poi ses enfans norrir. E por ço li cuist on la destre qu'ele ne li nuise al traire, quant ele est en bataille.

'A trois lieues de Iherusalem a une fontaine devers solel couchant, c'on apele la fontaine d'Emaus La soloit avoir un chastel, dont il avint, si com l'evangiles tesmogne, que nostre Sire ala avec dos de ses desiples, quant il fu resuscités, dusc'a cel chastel, e s'asisent a cele fontaine por mangier, si qu'il ne le conurent mie desci qu'il brisa le pain Adont s'esvanui d'aus, e il s'en retornerent en Iherusalem as apostres, por faire savoir a iaus, comment il avoient a lui parlé

'Or revieng a la porte saint Estene, a la rue qui vait a main senestre e vait a le posterne de le tanerie Quant on a alé une piece de cele rue, si trueve on une rue a main senestre, c'on apele le rue de Josafas Quant on a alé un poi avant, si trueve on un quarefor d'une voie, dont la voie qui vient de senestre, vient del temple e vait al sepucre Al cief de cele voie a une porte par devers le temple, c'on apele porte dolereuse Par la issi fors Ihesus, quant on le mena el mont de Cauvaire por crucefier, e poi çou l'apele on porte dolereuse A main destre sor le quarrefor de cele voie fu li ruisiaus, dont l'evangiles tesmogne que nostre Sire passa, quant il fu menés crucefier En cel endroit a un mostier de saint Jehan Evangeliste, e si avoit un grant manoir Cil manoirs e li mostiers estoit des nonains de Bethanie. La manoient eles, quant il estoit guerre de sarrasins

'Or revieng a la rue de Josafas Entre la rue de Josafas e les murs de la cité, a main senestre, a rues jusc'a la porte de Josafas ausi com une vile La manoient li plus des suriens de Iherusalem, e ces rues apeloit on la juerie En cele juerie avoit un mostier de sainte Marie Madalaine, e pres del mostier avoit une posterne, dont on ne pooit mie hors issir as cans, mais entre il murs en aloit on

'A main destre de cele rue de Josafas avoit un mostier, c'on apeloit le repos La dist on que Ihesu Cris se reposa, quant on le mena crucefier, e la estoit la prisons u il fu mis la nuit qu'il fu pris en Gessemani. Un poi avant, a main senestre de cele rue, estoit la maisons Pilate Devant cele maison avoit une posterne, par ou on aloit al temple

'Pres de la porte de Josafas, a main senestre, avoit une abeie de nonains qui avoit a non sainte Anne Devant cele abeie a une fontaine qui a a non la pecine Desor le fontaine avoit un mostier E cele fontaine ne cort point, ains est en une fosse desos le mostier A cele fontaine, al tans que Ihesu Cris fu en terre, avenoit que li angles par fies venoit movoir cele ewe, e qui primes descendoit a cele fontaine, por baignier apres çou que li angles l'avait mute, il estoit garis de quel enferté qu'il eust. Cele fontaine avoit cinq porches, e devant ces porches si gisoient molt de malades e d'enfers e de langereus, por atendre le movement de l'ewe Dont il avint que Ihesu Cris vint la un jor e trova la un home gisant en son lit qui XXXVIII ans i avoit jut, se li demanda Ihesu Cris, s'il voloit estre garis E il li respondi Sire, je n'ai home qui m'ajut a descendre en la fontaine, quant il angles a mute l'ewe E quant il l'a mute e je m'esmuet, por aler la, si truis je un autre qui s i est baignés devant moi Dont vint Ihesu Cris, se li dist qu'il ostsat son lit e si s'en alast E cil sali sus tos sains e tos saus, e si s'en ala Cel jor estoit samedis, si com l'evangiles tesmogne

'Si com on ist de la porte de Josafas, si avale on el val de Josafas A main destre de cele porte sont portes oires El val de Josafas si avoit une abeie de noirs moines En cele abeie avoit un mostier de madame sainte Marie En cel mostier estoit li sepucres u ele

fu enfoie, e est encore Li sarrasin, quant il orent prise la cité, abatirent cele abeie e enporterent les pieres a le cité fermer, mais le mostier n'abatirent il mie. Devant cel mostier, al pié de mont Olivet, a un mostier en un roche, c'on apele Gessemani La fu Ihesu Cris pris D'autre part la voie, si com on monte el mont Olivet, tant com on geteroit une piere, avoit un mostier, c'on apeloit saint sauveur La ala Ihesu Cris orer la nuit qu'il fu pris, e la li degota li sans de son cors ausi com suor El val de Josafas avoit hermites e renclus ases tos contre val, que je ne vos sai mie nomer, deci c'a la fontaine de Syloe

'En som le mont Olivet avoit une abeie de blans moines Pres de cele abeie, a main destre, avoit une voie qui aloit en Bethanie, toute la costiere de la montagne Sor le tor de cele voie, a main destre, avoit un mostier, c'on apeloit saint paternostre La dist on que Ihesu Cris fis la paternostre e l'ensegna a ses apostres Pres d'iluec fu li figiers que Dex maudi, quant il ala en Iherusalem, por ço que li apostre i alerent coillir des figes e si n'en i troverent nule, e si n'estoit mie tans qu'eles i deussent estre Cel jor meismes retorna Ihesu Cris de Iherusalem, por aler en Bethanie, e li apostre alerent par devant le figier, si le troverent sec

'Entre le mostier de la paternostre et Bethanie, en la coste de la montagne, avoit un mostier qui avoit a non Bethfage La vint Ihesu Cris le jor de le pasque florie, e d'iluecques envoia il en Iherusalem dos de ses desciples por une asnesse, e d'iluec ala il sor l'asnesse en Iherusalem, quant il l'orent amenee

'Or vos ai dit e nomé les abeies e les mostiers de Iherusalem e de dehors Iherusalem e les rues des latins, mais je ne vos ai mie nomé ne nomerai les abeies ne les mostiers des suriens, ne des grejois, ne des jacobins, ne des boanins, ne des nestorins, ne des hermins, ne d'autres gens qui n'estoient mie obeissant a Rome, dont il avoit abeies e mostiers en la cité Por ço ne vos vuel mie parler de totes ces gens qui j'ai chi nomé, qu'il ne sont mie obeissant a Rome'

John of Wirtzburg, who follows, died about the year 1213 A.D, and his account is much like that of Theodoricus, but contains several important details, such as his description of the outer wall of the Dome of the Rock.

'Nunc vero eamus ad repræsentationem Domini, adjicientes hoc de circumcisione ejus, quæ facta est in templo Domini octavo die, quod ipsa, quamvis in ea carnis abscissio depositionem vitiorum in mentibus aliorum significet, tamen, quia ad vetus testamentum pertinet, in eo consummationem accipiens, a modo cessare debeat Inter sacramenta novi testamenti circumcisio non computatur, nec pertinet ad aliquod septem sigillorum Sicut jam diximus, Dominus noster Jesus Christus a matre sua in templo est repræsentatus, receptus ab ulnis beati Simeonis spiritu prophetico inferentis "Nunc dimittis servum tuum, Domine," etc In templo Dominus noster Jesus Christus jam major factus, dum moraretur Jerusalem, etiam duodennis disputabat cum judæis et docebat eos sæpe postea, licet cum odio habuerunt In templo laudavit munus pauperis, quod in gazophylazium miserat, quia totum, quod habebat, dederat Super pinnaculum templi, quod reputatur supra latus circuitus, habens subtus se fenestras, quasi pinnas vel cinnas, statuit Jesum diabolus, et, tertio cum propter baptismum et jejunium tentans, dixit "Si filius Dei es, mitte te deorsum" In templo Domini XI kalend decembris dicitur beata virgo Maria, jam trium annorum, oblata fuisse, ut hi versiculi docent ibidem inscripti.

'Virginibus septem virgo comitata puellis,
servitura Deo, fuit hic oblata triennis

'Ibi quidem sæpe solatium angelicum percepit Unde versus

'Pascitur angelico virgo ministerio

'XI kalend decembris præsentatio beatæ Mariæ virginis in templo unde hæc dicitur oratio in eodem templo Oratio Deus, qui sanctam Dei genitricem, templum spiritus sancti, post triennium in templo Domini præsentari voluisti, respice ad devotam tibi plebem, et præsta, ut, qui ejus præsentationis festa veneramur, ipsi templum, in quo habitare digneris, efficiamur Per Dominum, etc

'De templo vendentes et ementes ejecit Dominus Jesus Christus, ad cujus rei indicium adhuc in dextra parte templi ostenditur lapis cum magna veneratione luminariorum et ornatus, tamquam pede Domini calatus et insignitus, quando ipse solus virtute divina tot restitit hominibus eos violenter ejiciendo qui lapis adjunctus est lapidi, super quem tamquam in altare depingitur Dominus noster oblatus fuisse, ut demonstratur in pictura et superscriptione, quæ talis est

'Hic fuit oblatus rex regum virgine natus,
quapropter sanctus locus est hic jure vocatus
Hic Jacob scalam vidit, construxit et aram
Hinc locus ornatur, quo sanctus jure vocatur

'Quod vero ibidem in lapide eodem Jacob depingitur caput posuisse, quando dormiens vidit scalam in cœlum porrectam, per quam angeli ascenderunt et descenderunt, salva templi reverentia, non verum est ubi et hic versus appositus est

'Hæc tua sit terra Jacob cum prole futura

'Sed hoc non eo loco accidit, sed longe alibi ad Mesopotamiam eunti, scilicet juxta majorem Mahumeriam

'In templo liberavit Dominus noster adulteram ab accusantibus, dicens "Qui sine peccato est," etc, qui etiam illis accusatoribus tacentibus et exeuntibus dixit "Muher, vade in pace, et jam amplius noli peccare" Locus ille repræsentatur in parva crypta ejusdem templi, ad quam introitus est in sinistra parte templi, et vocatur confessio. In eundem locum dicitur ingressus Zacharias, quando ab angelo de conceptione Johannis est certificatus Hoc totum indicat pictura et superscriptiones, quæ tales sunt Angelus ad Zachariam "Ne timeas, Zacharia, exaudita est oratio tua," etc In superliminari imago Christi Absolvo gentes sua crimina corde fatentes

'In templo ad altare, quod extra erat sub divo, remotum a templo plus quam per XXII passus, Zacharias, filius Barachiæ, martyr occubuit, supra quod in veteri testamento judæi turtures et columbas sacrificare solebant quod a sarracenis postea mutatum est in horologium, et adhuc videri potest, et notari, quod plures sarraceni etiam hodie orandi causa ad ipsum, versus meridiem dispositum, ad quem ipsi orare solent, veniunt.

'Idem vero templum Domini, miro tabulatu marmoreo intus et exterius a quocunque exstructum, formam habet rotundam decentem, immo circulariter octogonam, id est, octo angulos habentem in circuitu, habens parietem de optimo musivo opere exterius adornatum usque ad medietatem ejus, nam reliqua pars est de marmoreis lapidibus Idem paries inferior est continuus, præterquam quod quatuor ostiis interrumpitur, habens ad orientem ostium unum, cui adjuncta est capella in honore sancti Jacobi consecrata; nam ab ea parte, de tecto templi

ipse præcipitatus, pertica fullonis fuit occisus qui primus pontifex fuit sub novæ legis gratia in Jerusalem Unde et hi versus sunt appositi in eadem capella, in latere parietis

'Jacobus Alphæi, Domini similis faciei,
finit pro Christo, templo depulsus ab isto
Sic Jacobum justum, prædicantem publice Christum,
plebs mala muletavit, fullonis pertica stravit

'Hi in circuitu quasi ciborii ejusdem capellæ intus et supra continentur

'Jacobus Alphæi, frater Domini nazaræi,
piscator vita, vere fuit israelita
De templi pinna compulsus fraude maligna,
ad Christum lætus migravit, vecte peremtus

'Ad aquilone habens ostium unum versus claustrum dominorum, in cujus superliminari plures litteræ sarracenicæ sunt appositæ Ibidem vero juxta idem ostium est locus illius aquæ salubris, de qua propheta "Vidi aquam egredientem de latere," etc In introitu templi versus occidentem, supra vestibulum, Christi imago est, circa quam hoc continetur epigramma "Hæc domus mea domus orationis vocabitur" A meridie quoque habet ostium versus ædificium Salomonis Ab occidente etiam habet ostium versus sepulchrum Domini, ubi et porta speciosa, per quam Petrus, cum Johanne transiens, respondens pauperi eleemosynam ab eis petenti, cum esset claudus, dixit. "Argentum et aurum non est mihi," etc Utrumlibet istorum duorum ostiorum, videlicet ab aquilone et ab occidente, habet sex januas modo valvarum conjunctas; nam illud versus meridiem habet quatuor, illud vero ad orientem tantum duas Quodlibet autem ostiorum pulchrum habet vestibulum

'Hæc circa inferiorem parietem, sed in superiore parte ejusdem parietis, scilicet ubi musivum opus optimum appositum est, fenestræ sunt intersertæ sic, quod in quolibet de octo lateribus sunt quinque, præterquam ubi sunt ostia templi, in quibus quatuor tantum continentur fenestræ, et est summa earum triginta sex. Inter istum exteriorem in circuitu parietem et interiores columnas marmoreas et magnas, quæ numero sunt duodecim et sustentant illum interiorem et strictiorem et elatiorem et penitus rotundum parietem, qui habet duodecim fenestras, suppositis etiam sibi quatuor quadratis basibus, inter hunc, inquam, et illum sunt sedecim columnæ et octo bases cum quadratis lapidibus marmoreis, cum spatio octo passuum, abhinc et inde sustentantes tectum medium inter exteriorem, latiorem parietem et interiorem, strictiorem, cum pulcherrimis laquearis supra se etiam juxta tectum locum deambulatorium circumquaque exhibentibus, et habentibus canales plumbeos aquam pluvialem exportantes Super hunc strictiorem parietem erigitur in altum testudo rotunda, intus depictas foris plumbo cooperta, cui signum sanctæ crucis in supremo a christianis est appositum, quod sarracenis est valde contrarium, et multi auri sui dispendio vellent esse remotum, nam licet fidem passionis Christi non habeant, tamen hoc templum venerantur, cum in eo creatorem suum adorent, quod tamen pro idolatria habendum est teste Augustino, qui asserit, idolatriam esse, quidquid fit præter fidem Christi

'In circuitu templi quasi sub tecto extra continetur hæc littera in ascensu versus occidentem Pax æterna ab æterno patre sit huic domui Benedicta gloria Domini de loco sancto suo Versus meridiem Bene fundata est domus Domini supra firmam petram Beati, qui habitant in domo tua, in sæcula sæculorum laudabunt te. Versus orientem

Vere Dominus est in loco illo, et ego nesciebam In domo tua, Domine, omnes dicent gloriam Versus septentrionem Templum Domini sanctum est Dei cultura est Dei ædificatio est Intus vero in templo in superiori linea per circuitum appositum est in magnis litteris illud responsorium · Audi, Domine, hymnum, cum versu suo Respice, Domine, etc In inferiore quoque ambitu cum aureis litteris quidam versiculi de illo hymno Urbs beata Jerusalem, continentur appositi

'Idem templum sic decenter compositum et exornatum circumquaque habet atrium latum atque planum, conjunctis lapidibus pavimentatum et in circuitu quadratum, ad quod a tribus partibus multis ascenditur gradibus Est enim idem atrium a qualitate terræ satis artificiose elevatum Et habet ab oriente in pariete suo latum introitum per quinque arcus quatuor magnis columnis sibi connexos, et hic paries sic patet versus portam auream, per quam Dominus quinto die ante passionem suam, sedens super asinam, solemniter introivit susceptus a pueris hebræis cum ramis palmarum, laudantibus et dicentibus "Hosanna filio David," etc Quæ porta ex divina dispositione, licet postea sæpe Jerusalem ab hostibus esset capta et destructa, semper remansit integra. Hæc etiam porta, ob reverentiam divini et mystici introitus Domini a Bethania per montem Oliveti Jerusalem ascendentis intus clausa, foris lapidibus obstructa, in nullo tempore patet alicui, nisi in die palmarum, quo omni anno, ob memoriam rei gestæ, solemniter aperitur processioni et universo populo peregrinorum sive civium A patriarcha facto sermone in pede montis Oliveti ad populum, finito eo die officio, iterum clauditur per totum annum ut prius, nisi in exaltatione sanctæ crucis, in qua etiam aperitur Circa eandem portam infra muros celebris sepultura habetur mortuorum

'Idem atrium a meridie habet patulum accessum per tres magnos arcus duabus columnis marmoreis conjunctos, et in eodem latere habet alium accessum priori latiorem Ab occidente vero versus civitatem pulchrum habet accessum, patens per quatuor arcus tribus columnis marmoreis continuatis Ab aquilone idem atrium angustatur in parte propter adjunctionem claustri dominorum, in reliquo ejusdem lateris satis pulchram habet latitudinem et accessum Pulchra quoque et satis ampla planities a meridie et occidenti, aliquantulum etiam versus septentrionem eidem atrio forinsecus adjacet in plano

'Hæc descriptio præfati templi et adjacentis loci sufficiat; potiori non invidemus

'In descensu majoris plateæ est porta magna, qua patet introitus in illud latum atrium templi Ad dextram manum versus meridiem est palatium illud, quod quondam Salomon dicitur extruxisse, ubi est stabulum mirabile capacitatis tantæ, quod plus quam duo millia equorum seu mille et quingenta camelorum possit capere Juxta idem palatium milites templari habent plurima adjuncta ædificia magna et ampla, cum extructione novæ et magnæ ecclesiæ nondum tamen consummatæ Eadem namque domus multas habet possessiones et infinitos reditus tam in illa terra, quam in aliis partibus Eleemosynam quidem facit satis magnam in Christi pauperes, sed non in decima parte ejus eleemosynæ, quam faciunt hospitales Eadem domus habet quampluries milites pro tuenda christianorum terra, sed hi, nescio quo infortunio, sive ex falso, sive ex vero, quoad famæ relationem, aspersi sunt perfidiæ dolo quod tamen manifeste probatum est per factum illud apud Damascum cum rege Cumado

'Juxta ædificia eorundem templariorum, versus orientem, super murum civitatis fuit hospitium justi Simeonis, in quo sæpe beatam Mariam virginem, matrem Domini, hospitalitatis et familiaritatis causa, dicitur recepisse, fovisse et alimenta præbuisse, sicut et ea nocte fecit, quando in sequenti die, videlicet quadragesimo die a nativitate Domini ipsum puerum cum matre sua in templo oblaturus, in ulnis suis ad altare eum retinens et offerens, spiritu prophetico cognoscens, eum illum fore, qui per tot et tanta retro spatia ab antiquis patribus

inenarrabili desiderio esset exspectatus, intulit prophetice "Nunc dimittis servum tuum Domine," etc. In eadem domo, modo in ecclesiam transmutata, beatus Simeon sepultus quiescit, ut ille versus ibi appositus indicat In eadem ecclesia infra in crypta retinentur adhuc et ostenduntur cum magna veneratione Christi de ligno incunabula'

'Appropinquante, ut diximus, Domini passione, post Lazari recuscitationem, die palmarum venit Hierosolymam Eodem die, solemnitate jam dicta peracta, rediit ad Olivcti montana, moraturus ibi usque ad feriam quintam, in qua facturus erat una cum discipulis suis cœnam dominicam, in qua veteris testamenti terminum novique testamenti initium posuit Misit ergo in civitatem, discipulis suis inquirentibus, ubi velit sibi pascha fieri, quosdam ex eis, ut venient et præpararent sibi habitaculum vel locum ad complendum hujusmodi cœnæ sacramenta idoneum, de quo plenius in Evangelio "Ite in civitatem et invenietis hominem amphoram aquæ bajulantem, sequimini eum," etc Hoc cœnaculum in monte Sion est inventum, in eo loco, in quo Salomon quondam egregium dicitur construxisse ædificium, de quo in Cantico Canticorum "Ferculum fecit sibi rex Salomon," etc Cœnaculum illud in superiori parte grande erat et latum, in cujus latitudine propter mysterii rationem Dominus noster cum discipulis suis dicitur cœnasse, ubi et proditorem suum cauta indicavit descriptione, reliquos confortans de instante sibi passione et dans eis sub specie panis corpus suum ad manducandum et sub specie vini sanguinem suum ad bibendum "Quotiescunque," etc., dicens

'Facta jam in superiori parte ejusdem habitaculi cœna, veri simile est ex ejusdem mysterii ratione, Dominum nostrum, in inferiori domus parte, humilitatis exemplum in lavatione pedum discipulorum ostendisse, sive mavis hoc ante cœnam vel post factum fuisse, ut quædam expositio innuit super illam litteram Evangelii Johannis "Et facta cœna surrexit," etc, sive autem hoc ante vel post factum fuerit, parum refert, sed hoc vel scire juvat, quod diversitatem loci adhuc hodie descriptio rei gestæ in ecclesia montis Sion innuit Nam in sinistra parte ejusdem ecclesiæ, in loco superiori, depicta apparet cœna, in inferiori, scilicet in crypta, lavatio pedum discipulorum ostenditur exhibita

'His itaque consummatis mysteriis, orationis causa cum discipulis suis redit ad montem Olivcti, in cujus montis pede et accubitu, dimittens discipulos suos, solus secessit ab eis, quantum erat jactus lapidis, scilicet Gethsemane Oravit ad patrem suum, dicens "Pater, si fieri potest," etc, ubi et ex tremore carnis sudorem fudit quasi sanguineum, et, ad discipulos suos reversus et inveniens eos dormientes, specialiter Petrum increpavit, dicens "Non potuisti una hora vigilare mecum?" et aliis discipulis "Dormite jam et requiescite,' etc Sic vice tertia in eundem locum ab eis secedens et easdem preces Deo patri porrigens, tandem confortatus a patre et a se ipso secundum quod Deus, tertio reversus ad discipulos, dixit "Vigilate et orate" Istorum locorum distinctio, videlicet, ubi discipuli remanserant, et ubi Dominus oraverat, manifeste in valle Josaphat apparet, nam juxta majorem ecclesiam, in qua sepultura beatæ Mariæ virginis, de qua postea dicemus, adhuc hodie in dextra parte introitus sui est capella cum caverna, in qua discipuli tristes et dormitantes remanserant, Domino ter secedenti ab eis et totiens redeunte Hoc adhuc ibidem indicat pictura existens Locus vero, ubi Dominus oravit, circumdatus est nova ecclesia, quæ dicitur ecclesia salvatoris, in cujus pavimento eminent tres non operati lapides, tamquam modicæ rupes in quibus dicitur Dominus orasse cum trina genuflexione, ad quos lapides fit veneratio et fidelium Christi oblatio cum devotione maxima Ad prædictam cavernam Dominus noster, noscens cum turbis Judam appropinquare, Judas enim, aliis discipulis post cœnam cum Domino remanentibus, solus abiit ad judæos, tractans cum eis de traditione Domini, mercedem pro-

ditionis triginta argenteis ab eis recipiens, cum turba jam appropinquavit : hoc, inquam, sciens Jesus, in eadem caverna dixit discipulis suis "Surgite, eamus, ecce appropinquavit," etc Sic egressus Gethsemane, per osculum Judæ cognitus, a cohorte transmissa est detentus, vinctus et deductus Verumtamen in præfata caverna ostenduntur quinque foramina in uno lapide, tamquam quinque digitis manus Domini impressa Domini, dico, jam capti et a persecutoribus violenter tracti, veluti sese retinentis Quidquid autem de hoc sit, nos procul dubio scimus, eum majoris potestatis et virtutis ampliora potuisse facere

'Traditus est, ut diximus, Dominus noster a discipulo suo, captus et ligatus a milite romano, reductus ad montem Sion, ubi tunc erat prætorium Pilati, nuncupatum lithostrotos, hebraice autem Gabatha Tunc enim temporis optima pars et fortitudo totius civitatis erat in altitudine ejusdem montis, sicut etiam turris David, quæ erat specula et tutamen reliquæ civitatis, erat in eo elevata, et ratione maternæ generationis et procurationis inferior pars ejusdem civitatis dicitur filia, unde "Dicite, filiæ Sion," etc Postea vero, destructa ibidem civitate et in alium locum, ubi nunc exstat, translata sub Aelio imperatore, mons quoque idem a sua celsitudine valde est humiliatus et adæquatus, turre etiam sublata inde cum aliis ædificiis Ostenditur autem hodie locus ille, ubi prætorium et turris David fuerat. Tunc temporis juxta idem prætorium versus meridiem erat illud grande ædificium, ubi Dominus cœnavit cum discipulis suis Juxta idem prætorium versus orientem erat atrium, in quod vinctus ducebatur et tota nocte illa retinebatur a custodibus et a judæorum principibus observantibus eum usque ad horam sistendi judicio in sequenti mane In eodem prætorio Petrus ter negavit Dominum ante galli cantum, ubi etiam, audito galli cantu, Domino eum respiciente, pie reminiscens verbi Jesu, vere pœnituit, flevit amare, fugiens in cavernam, quæ modo gallicantus vulgariterque Galilæa appellatur

'In monte Sion Christus discipulis suis apparuit, unde et hi versus inveniuntur ibi appositi in dextro latere ecclesiæ

'Christus discipulis apparuit hic galilæis
surgens Propterea locus est dictus Galilæa

'In via, qua de Sion descenditur in vallem Josaphat, sub porta montis Sion, super eandem cavernam, est ecclesia ædificata, quam hodie servant græci monachi

'Facto itaque sequenti mane judicio iniquo, damnatus ante prætorium in loco quodam flagellatur, alapis cæditur, et conspuitur, veste rubea induitur, spinea corona pungitur Quod indicat epigramma ibidem positum sic continens

'Iste coronatur, quo mundus jure regatur.

'Eundem locum designat capella ante majorem ecclesiam Sion, versus boream sita, continens picturam gestæ rei cum tali epigrammate

'Sanctus sanctorum damnatur voce reorum
Pro servis bellum patitur Deus atque flagellum
Hæc bona crux Christi Simoni subvenit isti
Non vehit hanc gratis, quæ dat bona cunctis beatis

'Ab eodem loco, post sententiam crucis et damnationis in se prolatam, crucem ad hoc præparatam imposuerunt humero Domini, causa deferendi usque ad locum patibuli, ut illa impleretur prophetia "Principatus ejus super humerum ejus," etc Supervenit autem

quidam cyrenæus, quem angariaverunt eandem crucem portare usque ad locum Calvariæ propter mysterium.

'Erat tunc temporis juxta situm antiquæ civitatis locus Calvariæ extra civitatem, qui addictus erat capitali sententia damnatis, a quorum decalvatione, crinibus eorum abrasis, aura consumtis eorum capitibus, etiam carne denudatis et non in terra defossis, idem locus Calvariæ dicebatur, vel ideo, quod in eo rei decalvabantur, id est, damnari solebant Idem vero locus, qui et hebraice Golgatha, erat in veteri rupe, sicut et hodie passim extra civitates eminentiora loca supplicio damnatorum sunt deputata Interim dum in eadem rupe per affixionem crux adaptaretur, Dominus noster in quodam loco, qui tunc campestris erat, vinctus quasi in carcere servabatur, qui locus nunc modum capellæ repræsentat et adhuc carcer Domini appellatur, et est, recte in opposita parte Calvariæ, in sinistra absida ecclesiæ Alii tamen aliter de eodem sentiunt loco, sicut præsens audivi.

'Post in loco Calvariæ, Pilati jussu, judæorum impulsu, Dominum nostrum tunica exutum, felle et aceto potatum milites romani crucis patibulo affixerunt, in quo, dum pateretur Jesus, matrem suam Johannes, amicus suus, sibi commendatam in suam accepit custodiam, ut virgo virginem custodiret, dicente Jesu matri suæ "Mulier, ecce filius tuus," demonstrationem, ut quidam asserunt, ad Johannem vel potius ad se ipsum faciens, quasi diceret Hoc modo patior ex filiatione, quam ex tua contraho maternitate, non autem ex ea habeo miracula facere Unde et alibi in nuptiis Chanæ Galilææ "Quid mihi et tibi, mulier?" Sic ad matrem, deinde vero ad Johannem "Ecce mater tua," scilicet, ratione filialis devotionis et administrationis

'In loco Calvariæ, dum in cruce pateretur hostia mundi, latroni pendenti ad dextram, ab eo petenti veniam, stolam immortalitatis promisit Crucis in patibulo perforatus lancea sanguinem emisit et aquam. ex stilla quorum aperti sunt oculi Longini, qui eum percusserat motu pietatis et confessionis, ne videlicet Jesus diutius vivens torqueretur. Domino nostro sic in crucis patibulo exspirante et animam suam sponte deponente, velum templi scissum est a summo usque deorsum, et eadem petra, in qua crux erat defixa, in ea parte, qua tangebatur sanguine, est per medium fissa, per quam fissuram sanguis ejus fluxit ad inferiora, in quibus dicitur a quibusdam Adam fuisse sepultum et sic in sanguine Christi baptizatum Ad cujus rei designationem dicunt, quasi caput mortuum ubique depingi ad pedes crucifixi, sed nihil est aliud, Adam in sanguine Christi baptizatum, quasi per sanguinem Christi redemtum, cum in Hebron scriptura referat eum fuisse sepultum Per deformem autem hominis faciem, quæ solet apponi subtus ad pedes crucifixi, mors potius et ejus destructio designatur Unde Dominus "O mors ero mors tua," id est, destructio tua Locus quidem Calvariæ est ad dextram in introitu majoris ecclesiæ, in cujus superiori parte scissura ejusdem petræ celebris cum magna solemnitate veneratur et adhuc hodie advenientibus manifeste ostenditur Eadem pars superior optimo musivo opere pulchre depicta, continetur passio Christi et ejus sepultura cum prophetarum testimonio gestæ rei hinc inde consono

'Nota, quod in eodem loco, sive crux fuerit infixa in rotundo foramine, quod adhuc patens ostenditur et in quod oblationes immittantur fidelium, sive in parte ea, ubi hastile cujusdam rotundi lapidis erectum ostenditur, ut quidam asserunt, et ut plus, quod ad situs positionem et ad sanguinis ex dextro latere ad rimam petræ emissionem, congruum et idoneum esse videtur, facies Domini pendentis in cruce, ex positionis necessitate, versus orientem declaratur posita fuisse

'Juxta eundem locum in superiori parte ad dextram est altare situm, in honore dominicæ passionis consecratum, et totus locus ille denominatur ab eadem passione Inferior vero pars

ejusdem Calvariæ subtus continet altare, et vocatur ad sanctum sanguinem, quia eo usque per rimam petræ sanguis Domini dicitur fluxisse, qui locus hodie retro idem altare designatus est per quamdam concavitatem ejusdem petræ, ubi dependet ampulla cum continua illuminatione

'Extra in introitu Calvariæ (versus leguntur)

'Hic locus insignis Calvaria sanctus habetur
pro duce, pro pretio, pro cruce, pro lavacro
Nempe Jesu cruor et titulus, sacra corporis unda
nos salvat, redimit protegit atque lavat

'In medio choro dominorum, non longe a loco Calvariæ, est quidam locus elevatione tabularum de marmore et reticulorum ferreorum concatenatione in modum altaris designatus, infra quas tabulas in pavimento, orbiculis quibusdam factis, meditullium terræ dicunt designatum, juxta illud "Operatus est salutem in medio terræ" In eodem quoque loco post resurrectionem dicitur Dominus apparuisse beatæ Mariæ Magdalenæ, et idem locus habetur in magna veneratione, lampade etiam intus dependente In eodem quoque loco quidam asserunt, quod Joseph corpus Jesu a Pilato impetravit, eodem die, hoc est, feria sexta sublatum de cruce lavit reverende, pretiosis liquoribus atque aromatibus condiens involutum in sindone munda, haud longe sepelivit in horto, in monumento, quod novum sibi de rupe sculpserat Inde descendit ad inferos, ad liberandum hominem In eodem loco surrexit Dominus vere a mortuis, leo de tribu Juda, morte subacta Ibi angelus Domini sanctis mulieribus apparuit, jam ab ostio monumenti lapide revoluto, Jesumque vere resurrexisse a mortuis nunciavit, et ait "Ite, nunciate fratribus meis," et iterum "Dicite discipulis ejus, et Petro"

'Eodem die, declinante jam ad vesperam, peregrini sub specie Christus latens apparuit duobus discipulis in via sub conquestu de morte illius tendentibus Nicopolim, id est Emmaus oppidum VI milliario ab Jerusalem contra occidentem quem et ibi secum receptum in hospitem recognoverunt in fractione panis, sed statim disparuit Deinde omnibus apparuit apostolis absque Thoma in monte Sion januis clausis, dicens eis: "Pax vobis" Octavo quoque die in monte eodem apparuit Thomæ cum reliquis discipulis, quando ei vulnera sua palpanda obtulit Quo facto Thomas intulit "Dominus meus et Deus meus" Hæ revelationes per picturam demonstrantur factæ in loco montis Sion, scilicet, in crypta majoris ecclesiæ, ubi etiam depingitur Dominus noster pedes discipulorum suorum lavisse, cum manifesta utriusque facti descriptione Post resurrectionem etiam secus mare Tiberiadis et in mari ter discipulis suis Jesus se manifestavit, et præter hæc alibi multoties ad comprobationem suæ resurrectionis jam factæ et nostræ resurrectionis adhuc futuræ

'Dispositio monumenti, in quo continetur sepulchrum Domini, fere rotundam habet formam, intus musivo opere decoratam Patet ab oriente per introitum parvi ostioli, ante quod habet protectum fere quadratum cum duabus januis Per unam intromittuntur ingressuri monumentum ad sepulchrum, per alteram emittuntur egressuri In eo quoque protecto resident custodes sepulchri Et tertium ostiolum habet versus chorum Eidem monumento ab occidente, videlicet ad caput sepulchri, forinsecus appositum est altare cum quadam quadrata superædificatione, cujus parietes tres de reticulis ferramenti pulchre compositis sunt, et vocatur illud altare ad sanctum sepulchrum. Idem monumentum satis amplum habet super se quasi ciborium rotundum et superius de argento coopertum, in altum elevatum versus foramen illud amplum in majori illo ædificio superius patulum quod ædificium circulariter cum

forma rotunda, circa monumentum satis amplum, in extremo habet continuum parietem diversis imaginibus sanctorum large depictum et ornatum pluribusque lampadibus illuminatum In strictiori ambitu ejusdem majoris ædificii octo columnæ marmoreæ rotundæ et totidem bases quadratæ, totidem tabulis quadratis marmoreis forinsecus ornatæ et circumquaque erectæ sustinent molem superiorem sub tecto, quod, ut diximus, patulum est in medio

'Sequuntur aliqui versus, qui in locis diversis leguntur.

'In superliminari ecclesiæ sancti sepulchri

'Quid, mulier, ploras? en jam quem quæris, adoras
Me dignum recoli, jam vivum tangere noli

'In superliminari introitus interioris ad sepulchrum Domini

'Christo surgenti locus et custos monumenti
angelus et vestis fuit, estque redemtio testis

'Intus ad depositionem Domini

'A caris caro cara Dei lacrimata levatur a cruce, pro miseris rex pius hæc patitur

'Intus prope ad Domini sepulturam.

'Conditur in tumulo conditus aromate Christus,
tollitur ad superos meriti moderamine justus
Gaudet homo, trepidant manes, gemit omnis abyssus
Est excessus Adæ Christo veniente remissus

'Item ibidem, sed per medium

'Sub tumulo lapidis dum sic Christus tumulatur,
ejus ad exequias homini cœlum reseratur

'Diximus, quod columnæ circulariter cum prædicto numero sint appositæ, sed modo versus orientem mutata est earum dispositio et numerus propter adjectionem novæ ecclesiæ, ad quam inde est transitus Et continet illud novum et de novo additum ædificium satis amplum chorum dominorum et satis longum sanctuarium, continens majus altare in honorem anastaseos, id est, sanctæ resurrectionis, consecratum, quod et superius apposita pictura in opere musivo declarat. Continetur enim in ea imago Christi, seris confractis inferni, resurgentis, antiquum patrem nostrum Adam inde extrahentis Extra hoc altaris sanctuarium et intra claustri ambitum continetur satis latum spatium circumquaque tam per hoc novum, quam per antiquum præfati monumenti ædificium processioni idoneum, quæ et fit singulis dominicis noctibus a pascha usque ad adventum Domini in vesperis ad sanctum sepulchrum, cum antiphona "Christus resurgens," cujus etiam antiphonæ textus extra in extremo margine monumenti litteris in argento elevatis continetur Finita ea antiphona per cantum, cantor statim incipit: "Vespere autem," etc, cum psalmo "Magnificat," et cum collecta de resurrectione Omnipotens sempiterne, præmisso versiculo Surrexit Dominus de hoc sepulchro Similiter per hoc tempus omni die dominico missa celebratur Resurrexi.

'In capite etiam ejusdem ecclesiæ novæ versus orientem, juxta claustrum dominorum, est locus in profundo, in modum cryptæ, cum magna satis serenitate, in quo regina Helena crucem Domini dicitur reperisse, in cujus Helenæ honorem ibidem continetur altare consecratum quæ regina majorem ejusdem ligni sacri partem secum detulit Constantino-

polim, reliqua vero pars Hierosolymis relicta diligenter et reverenter servatur in quodam loco, in altera parte ecclesiæ, ex opposito loco Calvariæ.

'Ejusdem loci, licet sanguine Christi ibidem effuso jam dudum consecrati, in modernis temporibus, licet ex superabundanti, facta est a viris venerabilibus consecratio quinto decimo die julii. Unde et tales versus sub quodam in litteris deaurato opere propositis adhuc testantur ibidem conscripti

'Est locus iste sacer sacratus sanguine Christi
Per nostrum sacrate sacio nil additur isti
Sed domus huic sacro circum superædificata
est quinta decima quintilis luce sacrata

'Eodem quoque die, in eodem mense, licet longe jam anteriori tempore, cum jam dudum eadem civitas sancta sub dominatu sarracenorum diversorum generum detineretur captiva, ab exercitu christianorum est liberata, ad cujus liberationis commemorationem eundem diem post consecrationis renovationem cum spirituali officio reddunt celebrem in priori missa decantando "Lætare, Jerusalem," majorem vero missam celebrant de dedicatione "Terribilis est locus." Nam eodem die quatuor etiam altaria in eadem ecclesia sunt consecrata, scilicet, altare majus et illud superius in Calvaria et duo in latere ecclesiæ ex opposita parte, unum videlicet in honorem sancti Petri et aliud in honorem sancti Stephani protomartyris.

'In sequenti die solemnem faciunt tam in eleemosynis, quam in orationibus commemorationem omnium fidelium defunctorum, præcipue occasione in expugnatione urbis occisorum, quorum maxime sepultura apud portam auream celebris habetur. In tertio die anniversarium ducis felicis memoriæ et egregii Gotefridi, illius sanctæ expeditionis principis et magistri, stirpe alemanorum oriundi, tota civitas solemniter observat cum larga eleemosynarum in majori ecclesia distributione ex sui ipsius adhuc viventis dispositione.

'Verumtamen, quamvis sic ibidem de suo honoretur, tamen expugnatio civitatis non ei cum alemannis, non minime in ea expeditione laborantibus et exercitatis, sed solis adscribitur francis. Unde etiam detractores nostræ gentis epitaphium illius famosi Wiggeri, per multa fortia facta approbati, quia non poterant eum denegare esse alemannum, deleverunt et cujusdem militis de Francia superposuerunt, sicut adhuc a præsentibus videri potest, nam ejus sarcophagus extra in angulo quodam inter majorem ecclesiam et sancti Johannis Baptistæ capellam adhuc hodie extans apparet, deleto inde nomine suo et apposito alieno. Ad comprobationem et indicium despectus virorum nostrorum et ad commendationem francorum tale epigramma ad monumentum in latere extra legitur appositum

'Anno centeno milleno quo minus uno
virginis a partu, Domini, qui claruit, ortu,
quindecies julio jam phœbi lumine tacto,
Jerusalem franci capiunt virtute potenti

'Contra quod ego.

'Non franci, sed francones, gladio potiores,
Jerusalem sanctam longo sub tempore captam
a paganorum solvere jugo variorum
Franco, non francus, Wigger, Guntram, Gotefridus
dux, argumento sunt hæc fore cognita vero.

'Quamvis autem dux Gotefridus et frater ejus Balduinus, qui post ipsum in Jerusalem rex est constitutus, quod ante eum dux humilitatis causa de se fieri recusavit, de nostris essent partibus, tamen quia, nostratum paucis cum eis remanentibus et aliis quampluribus magno desiderio et festinatione ad natale solum redeuntibus, tota civitas occupata est ab aliis nationibus, scilicet, francis, lotharingis, normannis, provincialibus, alvernis, italis et hispanis et burgundionibus simul in expeditione convenientibus, sicut nulla pars civitatis etiam in minima platea esset alemannis distributa Ipsis non curantibus, nec animum ibidem remanendi habentibus, tacito eorum nomine, solis francis liberatio sanctæ urbis adscribitur, qui et hodie cum aliis prænominatis gentibus urbi præfatæ, adjacenti provinciæ dominantur Quæ utique christianitatis provincia jam dudum suos terminos ultra Nilum versus meridiem et ultra Damascum versus septentrionem extendisset, si tanta copia alemanorum, quanta est istorum, adesset Sed, his impræsentiarum omissis, ad propositam materiam revertamur

'In monte Oliveti, in eo loco, ubi hodie exstat magna ecclesia, in cujus medio, magno foramine quodam aperto, designatur locus ascensionis dominicæ, a quo loco, discipulis suis aliisque viris galilæis una cum matre sua admirantibus, in cœlum nube bajula est elevatus, præmisso ad discipulos mandato, ne ab Hierosolymis discederent, priusquam spiritum paraclitum a patre promissum ad plenariam sui confortationem acciperent Quod et factum est decimo die ab ascensione Domini et quinquagesimo die a resurrectione Domini, videlicet in die pentecostes, discipulis in quodam conclavi illius præfati ædificii in monte Sion manentibus, ubi et Dominus noster dicitur cœnasse, in completione promissi exspectantibus, quod adhuc in eodem loco pictura exstante de musivo opere in sanctuario, abside ejus, dem ecclesiæ, demonstratur, nam ibi duodenarius apostolorum numerus cum ipsorum imaginibus, spiritu sancto in forma ignearum linguarum ad capita singulorum descendente, per similitudinem picturæ continetur, cum tali epigrammate "Factus est repente de cœlo sonus advenientis," etc

'In eadem ecclesia, ad dextram scilicet in introitu ejus, altare designatur locus cum politis tabulis de marmore in modum ciborii, ubi beata virgo Maria, emisso spiritu, præsenti dicitur migrasse sæculo, ubi et filius suus, Dominus noster Jesus Christus, animam suam in juxta posito pariete, præsentibus apostolis, depingitur assumere In ædificio autem eidem loco superposito in circuitu talis reperitur superscriptio Exaltata est sancta Dei genitrix super choros angelorum

'His visis et summatim locis, in quibus hæc acta sunt cum descriptione etiam aliorum locorum his adjacentium denotatis, ad ipsam etiam sanctam civitatem Jerusalem per sancta nova et venerabilia loca de novo exstructa et in cultum divinum mancipata intra muros describenda redeamus

'Hoc etiam per adjectionem cognito, quod Judas in eadem civitate argenteos accepit pro traditione Domini nostri, cum quibus emtus est ager ille Hakeldama, id est, ager sanguinis, deputatus sepulturæ peregrinorum usque in diem hodiernum, qui situs est ad sinistram montis Sion, secus viam, quæ ducit Ephrata Super quem agrum est mons Gion junctus, in quo rex Salomon regium diadema suscepit et alii reges in eodem monte inungi solebant

'Et nota, quod Dominus noster in medio Jerusalem suscitavit puellam a morte, et in ea multa est operatus miracula Juxta ecclesiam sancti sepulchri, quam superius descripsimus, ex opposito versus meridiem est pulchra ecclesia in honore sancti Johannis Baptistæ constructa, cui adjectum est hospitale, in quo per diversas mansiones maxima multitudo infirmorum, tam mulierum, quam virorum, colligitur, fovetur et maximis expensis quotidie reficitur quorum summa tunc temporis, cum essem præsens, ab ipsis servitoribus hoc referentibus ad duo

millia languentium fuisse cognovi, ex quibus aliquando intra noctem et diem plus quam quinquaginta mortui exportantur, iterum atque iterum pluribus de novo accedentibus Quid plura? Eadem domus tot homines tam extra, quam intus suis sustentat victualibus, præter infinitam eleemosynam, quæ quotidie pauperibus datur ostiatim panem quærentibus et extra manentibus, quod certe summa sumtuum nequaquam potest deprehendi etiam ab ejus domus procuratoribus et dispensatoribus. Præter horum omnium siquidem expensam tam in infirmis, quam in pauperibus aliis factam, eadem domus multas universis militaribus rebus instructas pro defensione terræ christianorum ab incursione saracenorum passim per castella sua sustentat personas Juxta eandem Johannis ecclesiam est cœnobium sanctimonialium in honorem sanctæ Mariæ constructum, et est fere contiguum in capite cum ædificiis præfatæ ecclesiæ vocaturque ad sanctam Mariam majorem Non longe abhinc, in eodem ordine ejusdem plateæ, est cœnobium monachorum, item in honorem sanctæ Mariæ constructum et vocatur ad sanctam Mariam latinam, ubi testa vel caput sancti Philippi apostoli in magna veneratione habetur, et etiam cum devotione advenientibus et id postulantibus ostenditur.

'Juxta illam plateam, quæ a porta David versus templum per descensum dirigitur, in latere dextro, prope turrim David est cœnobium monachorum armenorum in honore sancti Sabæ, abbatis reverendissimi, pro quo etiam adhuc vivente beata virgo Maria, multa fecit miracula, constructum Ibidem, non longe abhinc, per descensum ultra aliam plateam est magna ecclesia in honorem sancti Jacobi majoris constructa, ubi monachi habitant armeni, et habent etiam ibidem magnum hospitale pro colligendis pauperibus suæ linguæ Ibi quoque in magna veneratione habetur testa ejusdem apostoli, fuit enim ab Herode decollatus, cujus corpus discipuli sui in Joppe navi impositum in Galiciam detulerunt, capite suo in Palæstina remanente. Eadem testa adhuc in eadem ecclesia peregrinis advenientibus ostenditur

'In descensu ejusdem plateæ, versus portam, qua itur ad templum, ad dextram manum est quoddam diverticulum per longam porticum, in qua via est hospitale cum ecclesia, quæ fit de novo in honore sanctæ Mariæ, et vocatur domus alemannorum, cui pauci vel nulli alterius linguæ homines aliquid boni conferunt

'In eadem via versus portam, qua itur ad montem Sion, est quædam capella in honore sancti Petri ædificata, in cujus crypta satis in profundo abscondita dicitur carcer fuisse, in quo beatus Petrus, ferreis catenis ligatus, custodia militum tam extra, quam intus adhibita, jussu Herodis diligenter servabatur, sed ea diligentia elusa est divina potentia Nam eadem nocte, angeli obsequio, inter medios custodes, vinculis ferreis ruptis, ultro apertis ostiis tam carceris, quam civitatis, beatus Petrus angeli conductu abivit illæsus, dicens "Nunc scio vere, quia misit Dominus angelum suum," etc In introitu ejusdem ecclesiolæ de eodem facto ibidem miraculo tales leguntur appositi versus

'Vestibus indutus, Petre, surge, recede solutus;
namque catenarum sunt vincula rupta tuarum,
nunc scio re certa, cum porta mihi sit aperta
O pietas Christi, quoniam me salvificasti.

'In cavea ejusdem ecclesiæ ad vincula, sancti Petri festo ibidem existente celebri, missam celebravi cum collecta merito ibidem sic prolata: Deus, qui beatum Petrum apostolum a vinculis in hoc loco absolutum illæsum abire fecisti, etc Ecclesiola eadem modica est, nec odea reditibus ditata vel culta ornatu, sicut tantum divinum miraculum et tantum principem

apostolorum decoret Porta illa, quæ dirigitur versus montem Sion, vocatur porta ferrea, quæ ultro fuit aperta angelo et Petro

'In opposito atrii de templo, scilicet versus septentrionem ad portam, qua itur ad vallem Josaphat, est ecclesia magna in honore sanctæ Annæ constructa, in qua per picturam ostenditur, qua dispositione et admonitione divina ex ipsa et Joachim sit concepta beata virgo, sicut in vita beatæ Annæ largius cognoscitur, cujus festum in die sancti Jacobi majoris cum magna solemnitate ibidem celebratur cui præsens interfui In eadem ecclesia servit Deo collegium sanctimonialium et utinam sacrosanctarum In exitu ejusdem ecclesiæ, ad dextram manum non longe, per diverticulum est probatica piscina, quam tempore Jesu certis terminis angelus Domini solebat movere Quicunque autem infirmus post motionem aquæ prior intrabat, a quacunque detinebatur infirmitate, sanus fiebat Πρόβατον græce pecualis dicitur, eo quod in sacrificiis inde solebant ablui exta pecudum, erat quippe rubea aqua ex hostiis, quæ ibi mundabantur Ante probaticam piscinam languidum sanitati restituit Jesus, dicens ei "Tolle grabatum tuum et ambula"

'Inde ab eadem platea, quæ de porta Josaphat egreditur, sursum in proxima via, quæ ab hac declinat platea, ad dextram manum, sursum versus murum civitatis est illa ecclesia in honore sanctæ Maria Magdalenæ facta, ubi sunt monachi jacobitæ, de qua jam diximus, quæ dicenda novimus In præfata platea de porta vallis Josaphat itur per directum versus illam plateam, quæ ad portam sancti Stephani ducit, a qua deinde a septentrione versus plateas illas triplices, imo multiplices diversarum rerum venalium repræsentatrices, ad frontem majoris sancti sepulchri ecclesiæ dirigitur, in medio, inquam, illius plateæ est quidam arcus lapideus antiquus ultra eandem plateam incurvatus, sub quo dicitur beata virgo Maria cum felici et beata prole sua adhuc parvula et infantili quievisse et eidem lac ibidem præbuisse Quæ res gesta ibi facta pictura ostenditur, et idem locus, circumædificatione aliquantula a publico usu discretus, sine ecclesiæ appositione venerabilis, sub veneratione debita habetur et colitur

'Item de platea a porta s Stephani, directa sursum ad latus ecclesiæ sancti sepulchri, non multum longe ab ea versus septentrionem, est parva platea, juxta quam in quadam ecclesia syrorum quiescit sacrum divi Charitonis martyris corpus, quod ibi a syris monachis in magna veneratione habetur, et fere adhuc integrum in quadam lignea arcellula reconditum, elevato cooperculo, peregrinis advenientibus ostenditur Idem sanctus pater in cœnobio suo juxta fluvium Jordanis sito, una cum monachis suis, pro confessione nominis Christi a sarracenis fuit occisus

'Ante portam Jerusalem, quæ respicit ad occasum, qua parte liberata fuit urbs sub secundo Israel, saxis obrutus beatus Stephanus protomartyr occubuit inde translatus in Sion et sepultus inter Nicodemum et Gamalielem et Abibon, postea Constantinopoli, ad ultimum Romæ beato Laurentio contumulatus Unde et in tumulo

'Quem Sion occidit, nobis Bisancia misit

'Ante portam Jerusalem juxta lacum, qui respicit meridiem, cavea illa videtur, in quam leo quidam, jussu Dei omnipotentis, martyrum fere duodecim millia sub Cosroe peremta detulit nocte Unde et carnarium leonis dicitur.

'Secundo milliario ab Jerusalem via, quæ ducit Sichem, mons Gabaa in tribu Benjamin

'Milliario a Jerusalem, in accubitu montis Oliveti, mons Offensionis et continuus, dividit

autem eos via, quæ de Josaphat per Bethphage ducit Bethaniam Dictus mons Offensionis, eo quod Salomon in eo idolum posuit moloch, adorans eum

'Prope juxta Jerusalem, sub Salomonis regia in accubitu, in valle Josaphat natatoria Siloe, ad quam cœcum ab ea illuminatum misit Jesus, ut ab ea lavaret oculos suos Qui abiens lavit et vidit Ergo Siloe interpretatur missus Non ad eandam aquam Naaman, princeps Syriæ, missus est, sed ad Jordanem ab Helisæo propheta, ut in eo ter lotus curaretur a lepra quam ipse intuens quasi cum indignatione intulit "Numquid Pharphar et Abana non meliora sunt flumina," scilicet, nostræ provinciæ? Tandem tamen monitis servi sui consentiens, mandatum prophetæ implevit, et curatus est Siloe secundum traditionem syrorum ex Silo manare dicitur Siloe gurgitem suum cum silentio ducit, quia subterraneum Juxta Siloe exstitit quercus Rogel, sub qua beatus Isaias sepultus quiescit

'In valle Josaphat sepultus fuit beatus Jacobus Alphæi, qui de templo, ut dictum est, præcipitatus fuit Est autem in eadem valle pulchra capella, in qua indicium manet sepulturæ ejus, his superpositis versibus

'Urgent Alphæi natum sine lege judæi
Causa necis fit ei nomen amorque Dei
Alphæi natus de templo præcipitatus
huc fuit allatus et devote tumulatus.

'Verum exinde postea fuit apostolus Dei Constantinopolim translatus

'In valle Josaphat sub acuta pyramide rex idem Josaphat tumulatus fuit, a cujus nomine tota vallis sortita est nomen Interpretatur autem vallis judicii, juxta illud "Congregabo omnes gentes," etc. Eadem vallis ex omni parte plures habet caveas, in quibus religiosæ personæ vitam ducunt eremiticam

'Tota vallis pertinet ad cœnobium in summitate ejusdem vallis supra rivum torrentis Cedron situm, juxta hortum, in quo sæpe Dominus noster cum discipulis suis solebat convenire. In hujus cœnobii crypta adhuc hodie ostenditur sepultura beatissimæ virginis Mariæ, de qua amplius dicemus

'In eodem die transmigrationis corpus beatissimæ virginis Mariæ cunctis duodecim apostolis Domini ex sua dispositione tunc præsentibus in ecclesiam vallis Josaphat est delatum et ibidem in medio cryptæ, miro tabulatu marmoreo et egregia pictura colore vario exornatæ, est honorifice sepultum, cujus sepulturæ, licet corpore absente, egregia tam in tabulatu marmoreo, quam in argento et auro in modum ciborii superposita exstat structura, cui tale appositum est epigramma

'Hic Josaphat vallis, hinc est ad sidera callis.
In Domino fulta, fuit hic Maria sepulta
Hinc exaltata cœlos petit inviolata,
spes captivorum, via, lux et mater eorum

'Benedicto corpore absente, quia, ut dicitur, juxta morem hebræorum intra octavum diem transitus visitato et inspecto sepulchro, corpus ejus non est repertum Unde et pie creditur, non tantum animam, sed etiam corpus ejus a dilecto filio suo cum glorificatione fuisse assumtum, quod tamen Hieronymus potius hæsitando, quam asserendo videtur innuere in illa epistola Cogitis me, o Paula et Eustochium, etc. Quidquid autem de hoc sit, nos credimus, beatam virginem Mariam ex hoc solo, quod meruit suum portare creatorem, dignam fore

omni honore et beatificatione non tantum in anima, sed etiam in corpore, et filium suum summe benevolum et summe potentem id velle et posse Honoratur quoque et veneratur eadem ejus sepultura ratione cujusdam consortii, ad similitudinem honorificentiæ, quæ sepulchro dilecti filii sui exhibetur In introitu ejusdem cryptæ talis pictura et scriptura cernitur

'Hæredes vitæ, Dominum laudare venite,
per quam vita datur mundique salus reparatur

'Ex parte sinistra imago Hieronymi hanc continet scripturam

'Monstratur autem sepulchrum ejus, cernentibus nobis, usque in præsens in valle Josaphat, in medio, ubi in ejus honore fabricata est ecclesia miro lapideo tabulatu, in qua sepulta fuisse ab omnibus affirmatur In dextra vero ejusdem introitus imago beati Basilii continet hæc

'Matris Christi dignitate
et excelsa potestate
est repertus Julianus,
sævus hostis et profanus,
nam defunctum hunc prostravit,
sicut mater imperavit.
Salvatrici sit reginæ
laus et honor sine fine,
quæ elegit hic humari

'Hæc et alia plurima ad laudem virginis in introitu cryptæ per picturam sunt apposita, sed interiori parte in parietibus hinc inde circa tumbam existentibus et in laqueari talis scriptura est apposita, in dextro pariete Maria virgo assumta est ad æthereum thalamum, etc, postea in circuitu · Vidi speciosam sicut columbam, etc, usque et lilium convallium, ibique subjungitur Viderunt eam filiæ Sion Hinc certe gloriosa virgo cœlos ascendit. Rogo, gaudete, quia ineffabiliter sublimata cum Christo regnat in æternum, in anteriori Assumta est Maria in cœlum, ex opposito latere Exaltata est sancta Dei genitrix, etc, et in medio Multitudo angelorum adstantium in circuitu circa beatam Mariam in throno residentem, per quam facta via ad cœlestia regna declaratur

'In pede montis Oliveti versus civitatem, ubi modo ostenditur sepultura beatæ Mariæ virginis, erat viculus, qui dicebatur Gethsemane'

We may now pass on to consider the later Arab erections in Jerusalem, for the three centuries immediately following the time of Saladin's capture form a period of great architectural activity among the Arabs

Immediately after the fatal battle of Hattin, Jerusalem capitulated to Saladin in 1187 A.D. The Haram was forthwith purified, the altar over the Sakhrah and the pictures on the walls of the building were demolished The beautiful Mimbar, or pulpit, now in the Aksa, bearing the date 1168 A.D. (564 A.H.), was brought from Aleppo by Saladin for the newly recovered mosque, and the transept of the Aksa was restored in the same

year, when also the present Mihrab was constructed in the south wall, as shown by a fine Arabic inscription in mosaic above the Mihrab, containing the name of Saladin, and the date 583 A H.

Two years later the gilding of the woodwork inside the dome of the Kubbet es Sakhrah and the leaden outer covering was renewed by Saladin, as witnessed by the Arab inscription bearing the date 585 A H Other restorations of this painted cupola are dated 718 and 719 A H, and another date of the seventeenth century inserted into these inscriptions is partly illegible

In the year 1199 A D, the Emir Azz ed Din, Governor of Jerusalem, entirely rebuilt the small Dome of the Ascent (of Mohammed), the present Kubbet el Mâraj. The date given by Mejr ed Din agrees closely with that mentioned in a long inscription over the door of this structure, which gives 597 A H. (1200 or 1199 A D) as the time of the building of the Dome, which stands immediately north-west of the Dome of the Rock

In the year 1213 A.D., the north-western cloisters of the Haram were built as far as the present Bâb el 'Atm, by Melek Isa (according to Mejr ed Din). In the year 1236, Melek el Muazzam Isa built (or restored) the porch of el Aksa, according to an existing inscription, and other restorations of the porch and of the mosque are recorded in inscriptions bearing the dates 746 (1345 A D.), 748 (1347 A D.), 915 (1509 A.D.), 1233 (1817 A.D)

In 1250 A D was built the Kubbet Mûsa, near the Bâb es Silsileh, according to Mejr ed Din, who gives the name of the founder as Melek Saleh Nejm ed Din, and the date as 647 A H The minaret in the north-west angle of the Haram was built apparently in 697 A H (1297 A D), or even earlier, in the time of Kalawûn (Mejr ed Din) An inscription on a pillar-base at the entrance to the magazines east of el Aksa states that the wall (the outer wall of the Haram) was repaired in the time of Seif ed Din Kalawûn (1279–90) It is well cut in Arabic letters in relief

The western cloisters were built in the time of Melek Nasr Muhammed, son of Kalawûn, those in the north corner being as old as 707 A H (1307 A D), and those between Bâb el Mogharbi and Bâb es Silsileh dating from 713 (1313 A D.), according to Mejr ed Din, who appears

throughout to have had regard to existing inscriptions Another minaret was erected in the north-east angle by Sultan Ashraf Ibn Husein, in 769 (1367 A.D.), and others near Bâb el 'Atm and Bâb Hitta by Melek Efkad Thus part of the northern cloisters are 150 years older than those on the west The Bâb el Kattanin bears an inscription with the date 737 A.H. (1336 A.D.) The gate called Bâb en Nedhir is said by Mejr ed Din to have been repaired about 600 A.H. (1203 A.D.) The Bâb el Hadid was built by Arjûn el Kameli There are now four minarets, namely, that of Sultan Ashraf, on the north-east, that of Kalawûn, on the north-west angle, that by the Bâb es Silsileh, and the fourth on the south

In the year 1318 A.D. Fakhr ed Din, the Kadi of Jerusalem, restored the Dome of the Rock In 1327 Muhammed Ibn Kalawûn ordered the restoration of the dome of the Aksa Mosque, as evidenced by an existing inscription in the woodwork bearing the date 728 A.H. To the same reign belongs the fountain of el Kâs, north of the Aksa, dated 720 A.H. (1320 A.D.) The north-east minaret (1367 A.D.) is the latest known addition of this century.

The beautiful Sebil, or fountain of Kaiat Bey, bears the date 1445 A.D., and was erected by Melek el Ashraf The south-west flight of stairs to the platform is said by Mejr ed Din to have been built later than the others on this side, and to date from 877 A.H. (1472 A.D.)

In the year 1520 A.D. the bases and the blocks above the capitals of the outer arcade in the Dome of the Rock were cased in marble by Sultan Suleiman The beautiful glass windows of the building belong to the same reign, and bear the date 935 A.H. (or 1528 A.D.) An inscription with the date 969 A.H. (1561 A.D.) is found on the Kishani tiles of the Dome of the Chain, with the name of Soliman, son of Selim, son of Bayazid the Sultan, and one year before his death the same Sultan Soliman caused the present doors of the Dome of the Rock to be added in 972 A.H. (1564 A.D.)

The only important restoration dating later than 1564 A.D. is that of the ceiling of the arcade of the Dome of the Rock, which, as at present existing, was erected in 1190 A.H. (1776 A.D.) The Mimbar es Seif belongs to the sixteenth century Restorations were, however, effected in 1830, by the Sultan Mahmud, and in 1873–5, by order of the late

Sultan, Abd el 'Aziz. The east wall of the Haram was partly ruined in 1881, the small Arab masonry having fallen, and this is now about to be repaired

Having thus pursued the architectural history of the Haram down to the present day, we must turn back to notice other buildings in Jerusalem dating later than the capture by Saladin in 1187 A.D. The walls of the city were dismantled in 1219 A.D by Melek el Muazzam Isa, but the citadel on the west and the Haram on the east were left uninjured. In 1229 the Franks, contrary to treaty obligation, rebuilt the fortifications, but in 1239 they were again levelled by Emir Daud, of Kerak, and even the citadel was on this occasion dismantled. The fortifications remained lying in heaps until 1542, when Soliman the Magnificent built the present fortifications, as evidenced by Arabic inscriptions on the city gates, and elsewhere on the walls Much old material was re-used. Several Greek inscribed tablets are built into the ramparts, and fragments of mouldings, but the elegant pinnacles over the Damascus Gate, and along the walls, were evidently carved on purpose for their present positions

In the thirteenth, fourteenth, and sixteenth centuries various Jewish pilgrims wrote short accounts of Jerusalem, and an even earlier Jewish author (Benjamin of Tudela) has described the city briefly in 1163 A D In these itineraries the Tombs of the Kings are first mentioned as situated on Sion, whence arose the Moslem tradition placing David's tomb at the site of the Cœnaculum, which was on this pretext wrested from the Christians in 1561 A.D. The present cenotaph, or one very similar, is shown in a rude sketch in the Jichus ha Aboth in 1564 A D

Mejr ed Din enumerates various schools and public buildings of the fourteenth century in Jerusalem, including the school of the Emir Tunjuz, opposite the Bab es Silsileh, built in 720 A H (1320 A D) There were ten pious foundations on the west, and fourteen on the north of the Haram The Church of St Anne was converted into a school by Saladin, and known as the Salahiyeh. An inscription on the principal door bore the date equivalent to 1192 A D. This building remained in the hands of the Moslems until 1856, when the Sultan presented it to the French

The Hospital of St John was not injured by the Moslems, though

the Church of Sta Maria Majora was wrecked On the north-west corner of the hospital a minaret was erected, apparently by Melek Muzaffer, who endowed the hospital in 1216 A D. The small mosque in this corner, still in use, appears to be the place called the Cell of Derkah by Mejr ed Din. The present Khankah, north of the Holy Sepulchre, appears also to be mentioned by the same author as founded in 585 A H. (1189 A D) The Khankah of Fakhi, near the mosque of the Mughrabins, was founded by the Kadi of Jerusalem, Fakhr ed Din, in 732 A H (1332 A D) The mosque of the Mughrabins was erected earlier by the son of Saladin in 589 A H (1193 A D), but its minaret was only added in 791 A H (1389 A D) The Church of the Magdalen was converted into a school by Maimûn, son of Abdallah el Kasri, and endowed in 593 A H (1197 A D) This Emir was Saladin's treasurer.

Mejr ed Din devotes a whole chapter to the minarets of Jerusalem. A minaret at St. Anne's was erected by Sheikh Borhân ed Din before 820 A H (1417 A D.) That at the Cell of Derkah, being overthrown by earthquake in 863 A H, was restored in 870 A.H (1463 A D), and is still standing south of the Holy Sepulchre

Our knowledge of the streets, quarters, and gates of Jerusalem in the middle ages is very full and accurate, for we have not only the detailed description of the 'Citez de Jherusalem,' written shortly after the capture by Saladin, and the faithful account of Mejr ed Din, who was Kadi of Jerusalem in 1495 A D, but we have also the curious map of Marino Sanuto, dating from 1308 A D (cf. De Vogué's 'Églises de la Terre Sainte,' p 437, and Bongar's 'Gesta Dei per Francos') In this latter, the traditional sites now pointed out by the Latins and Greeks nearly all appear in their present positions, though many of the traditions have been transferred from sites mentioned by the Christian pilgrims of the centuries preceding the Crusades Most of these traditional sites remained quite undisputed till the commencement of the present century, and they are all still firmly credited by Greek and Roman Catholic pilgrims and writers, though they are not all considered as equally well authenticated by the educated Latin clergy, who allow that while the acceptation of the more important and ancient is a matter of faith, the less important may be held to be only probable and conjectural It is interesting, however, to notice how the number of traditional sites, consecrated by buildings

In the twelfth century also Benjamin of Tudela gives a short account from a Jewish point of view, and other Jewish tracts dating 1210, 1322, 1537, 1561, contain short notes of Jewish traditions. The work of Brocardus in 1283 A.D contains another account of the city, and in the fourteenth century we have the description of Sir John Maundeville (1322 A D.), and the map and description of Marino Sanuto (1322 A D). It is, however, doubtful whether the latter writer had visited Palestine The account of Mejr ed Din is the best extant of the Arab writings concerning Jerusalem, and dates about 1495 A D The pilgrim John Poloner, in 1422 A D, also gives an account from a Christian point of view.

Quaresmius, a Latin monk residing at Jerusalem, wrote an account of the Holy Land in 1616 A D, which includes a description of Jerusalem, chiefly from a traditional point of view Henry Maundrell, Chaplain of the Aleppo Factory, also gives a very intelligent sketch of the city in 1697 A D Reland in 1714 A D., Pococke in 1737, and Chateaubriand in 1807, bring us down to the commencement of the present century, when the idea of critical exploration may be said first to have arisen

The traditional site of the Holy Sepulchre was first disputed by Korte, the German bookseller, who wrote an interesting tract in 1738 A.D ; but scientific exploration dates from the first visit of Dr Robinson, in 1838, when that famous traveller laid down as a canon of criticism the worthlessness of monkish tradition Since this date the traditional view has been advocated by Canon Williams in 1849 ; while Thrupp in 1855, and Tobler in 1845-55, added to the existing information The valuable editions of Christian descriptions published by Tobler began to appear in 1851, while the latest of these *Palestinæ Descriptiones* appeared in 1874 Mr James Fergusson's earliest work on the topography of Jerusalem is dated 1847, and his latest ('Temples of the Jews') appeared in 1878 Amongst other authorities who wrote before the Ordnance Survey was undertaken, the most important are, Willis (1849), Lewin (1863), Stanley (1856), De Saulcy (1865), Barclay (1857), Vandevelde, and the important publications of the Duc de Vogué, including the 'Églises de la Terre Sainte' (1860) and the 'Temple de Jerusalem' (1864)

Plans of Jerusalem were executed by Sieber in 1818, by Catherwood in 1833, by Robinson 1838-56, by Tobler in 1850, and by Lieutenants Aldrich and Symons, R E., in 1849 Thrupp and Barclay made additions,

as did also Vandevelde, to existing plans; but these have all been entirely superseded by the Ordnance Survey, with its accompanying plans, executed under Sir Henry James, by Captain (now Colonel Sir Charles) Wilson, R E., at the expense of Lady Burdett-Coutts, and published in 1866. This survey is the basis of all the scientific exploration of the city which has been carried on by the Palestine Exploration Fund since the year 1866.

The work of the modern explorers has in great measure rendered obsolete the writings of all their predecessors, with the exception of the learned Robinson and the scientific work of De Vogué. The principal *theoretical* works which have as yet resulted from the explorations of Sir Charles Warren (1867-70), M. Clermont-Ganneau (1873-74), and Captain Conder (1872-82), have been the works called 'The Recovery of Jerusalem,' 'Underground Jerusalem' (Warren, 1876), 'The Temple or the Tomb' (Warren, 1880), together with two chapters by Captain Conder in 'Tent-Work in Palestine' (1878), and two chapters in Longmans' 'Handbook to the Bible' (Conder, 1879). Mr. Fergusson's 'Temples of the Jews' (1878) also defends his views in face of the results of Colonel Warren's discoveries.

Work of great value has also been carried on in Jerusalem during the last fifteen years by Herr Konrad Schick, and the results are incorporated in the present volume. The excavations of Dr. Guthe on Ophel in 1881 also resulted in increasing our information, and several minor excavations have been undertaken by residents. The clearing out of the Muristan by the German Government (1872-74), and the exploration of the Zion scarp by Mr. Henry Maudslay in 1874, have also added materially to our information.

STATEMENT OF THE PRINCIPAL CONTROVERSIES.

It has often been said that there is not a single topographical question connected with ancient Jerusalem which is not the subject of controversy. This is, however, rather overstating the case, for there are points concerning which all authorities are in accord First, as regards the natural features of the site, it is agreed that the Mount of Olives is the chain east of the Temple Hill, and that the valley beneath it on the west is the Brook Kedron. It is agreed that the Temple stood on the spur immediately west of the Kedron, and that the southern tongue of this spur was called Ophel. It is also agreed that the flat valley west of this spur is that to which Josephus applies the name Tyropœon, although there was a diversity of opinion as to the exact course of the valley, which has now been set at rest by the collection of the rock-levels within the city. It is also agreed by all authorities that the high south-western hill (to which the name Sion has been applied since the fourth century) is that which Josephus calls the hill of the Upper City, or Upper Market Place.

The site of the pool of Siloam is also undisputed, and the Rock Zoheleth was discovered by M Clermont Ganneau at the present village of Silwân As regards the walls of the ancient city, all authorities except Fergusson agree in placing the 'Royal Towers' in the vicinity of the present citadel, and all suppose the scarp in the Protestant Cemetery to be the old south-west angle of the city The Tyropœon Bridge is accepted by all writers since Robinson as leading to the royal cloisters of Herod's Temple, and all plans of the Temple start with the assumption that its south-west angle coincided with the present south-west angle of the Haram All plans also agree in accepting the east wall of the Haram

as an ancient rampart of the city. We have thus various data to begin with which must be considered as certain, because writers who differ on all other points agree on these

The chief controversies which still divide the opinions of contemporary authors are three in all. First, as to the extent of the ancient city before the destruction of 70 A D, and the names of certain natural features within its bounds. Secondly, with regard to the area included within the Temple Enclosure, especially at the time of the enlargement of the sanctuary by Herod the Great Thirdly, as regards the true site of Calvary and of the Holy Sepulchre, and respecting the position of the Basilica built by Constantine on what he supposed to be the true site

Questions respecting the topography of Jerusalem from the twelfth century down are not matters of controversy, our information being detailed and accurate, and the existing buildings numerous, and often well preserved We may therefore confine our attention in the present paper to the three great questions, on each of which the explorations of the Palestine Exploration Fund have thrown so much light as practically to render many theories previously held no longer tenable.

I. Extent of the Ancient City.

The following is the description of Josephus (Whiston's Translation) —

'1 The city of Jerusalem was fortified with three walls, on such parts as were not encompassed with unpassable valleys, for in such places it hath but one wall The city was built upon two hills, which are opposite to one another, and have a valley to divide them asunder, at which valley the corresponding rows of houses on both hills end Of these hills, that which contains the upper city is much higher, and in length more direct Accordingly it was called the Citadel by King David, he was the father of that Solomon who built this Temple at the first, but it is by us called the Upper Market Place But the other hill, which was called Acra, and sustains the lower city, is of the shape of a moon when she is gibbous, over against this there was a third hill, but naturally lower than Acra, and parted formerly from the other by a broad valley However, in those times, when the Asamoneans reigned, they filled up that valley with earth, and had a mind to join the city to the Temple They then took off part of the height of Acra, and reduced it to a less elevation than it was before, that the Temple might be superior to it Now the valley of the Tyropœon, as it was called, and was that which we told you before distinguished the hill of the upper city from that of the lower, extended as far as Siloam, for that is the name of a fountain which hath sweet water in it, and this in great plenty also But on the outsides, these hills are

surrounded by deep valleys, and by reason of the precipices to them belonging, on both sides they are everywhere unpassable.

'2 Now, of these three walls, the old one was hard to be taken, both by reason of the valleys, and of that hill on which it was built, and which was above them But besides that great advantage, as to the place where they were situated, it was also built very strong because David, and Solomon, and the following kings, were very zealous about this work Now that wall began on the north, at the tower called Hippicus, and extended as far as the Xistus, a place so called, and then joining to the council-house, ended at the west cloister of the Temple But if we go the other way westward, it began at the same place, and extended through a place called Bethso, to the gate of the Essens, and after that it went southward, having its bending above the fountain Siloam, where it also bends again towards the east at Solomon's Pool, and reaches as far as a certain place which they called Ophlas, where it was joined to the eastern cloister of the Temple The second wall took its beginning from that gate which they called Genneth, which belonged to the first wall, it only encompassed the northern quarter of the city, and reached as far as the tower Antonia The beginning of the third wall was at the tower Hippicus, whence it reached as far as the north quarter of the city, and the tower Psephinus, and then was so far extended till it came over against the monuments of Helena, which Helena was Queen of Adiabene, and mother of Izates, it then extended farther to a great length, and passed by the caverns of the kings, and bent again at the tower of the corner, at the monument which is called the Monument of the Fuller, and joined to the old wall at the valley called the Valley of Cedron It was Agrippa who encompassed the parts added to the old city with this wall, which had been all naked before, for as the city grew more populous, it gradually crept beyond its old limits, and those parts of it that stood northward of the Temple, and joined that hill to the city, made it considerably larger, and occasioned that hill which is in number the fourth, and is called Bezetha, to be inhabited also It lies over against the tower Antonia, but is divided from it by a deep valley, which was dug on purpose, and that in order to hinder the foundations of the tower of Antonia from joining to this hill, and thereby affording an opportunity for getting to it with ease, and hindering the security that arose from its superior elevation, for which reason also that depth of the ditch made the elevation of the towers more remarkable This new-built part of the city was called Bezetha in our language, which if interpreted in the Grecian language, may be called The New City. Since therefore its inhabitants stood in need of a covering, the father of the present king, and of the same name with him, Agrippa, began that wall we spoke of; but he left off building it when he had only laid the foundations, out of the fear he was in of Claudius Cæsar, lest he should suspect that so strong a wall was built in order to make some innovation in public affairs, for the city could no way have been taken if that wall had been finished in the manner it was begun, as its parts were connected together by stones 20 cubits long and 10 cubits broad, which could never have been either easily undermined by any iron tools, or shaken by any engines The wall was, however, 10 cubits wide, and it would probably have had an height greater than that had not his zeal who began it been hindered from exerting itself After this, it was erected with great diligence by the Jews, as high as 20 cubits, above which it had battlements of 2 cubits, and turrets of 3 cubits' altitude, insomuch that the altitude extended as far as 25 cubits

'3 Now the towers that were upon it were 20 cubits in breadth, and 20 cubits in height, they were square, and solid as was the wall itself, wherein the niceness of the joints and the beauty of the stones were no way inferior to those of the holy house itself Above this solid

altitude of the towers, which was 20 cubits, there were rooms of great magnificence, and over them upper rooms, and cisterns to receive rain water They were many in number, and the steps by which you ascended up to them were every one broad of these towers then the third wall had ninety, and the spaces between them were each 200 cubits, but in the middle wall were forty towers, and the old wall was parted into sixty, while the whole compass of the city was 33 furlongs Now the third wall was all of it wonderful, yet was the tower Psephinus elevated above it at the north-west corner, and there Titus pitched his own tent, for being 70 cubits high, it both afforded a prospect of Arabia at sunrising, as well as it did of the utmost limits of the Hebrew possessions at the sea westward Moreover, it was an octagon, and over against it was the tower Hippicus, and hard by two others were erected by King Herod, in the old wall These were for largeness, beauty, and strength, beyond all that were in the habitable earth, for besides the magnanimity of his nature, and his munificence towards the city on other occasions, he built these after such an extraordinary manner, to gratify his own private affections, and dedicated these towers to the memory of those three persons who had been the dearest to him, and from whom he named them They were his brother, his friend, and his wife This wife he had slain out of his love [and jealousy], as we have already related, the other two he lost in war, as they were courageously fighting. Hippicus, so named from his friend, was square, its length and breadth were each 25 cubits, and its height 30, and it had no vacuity in it Over this solid building, which was composed of great stones united together, there was a reservoir 20 cubits deep, over which there was an house of two stories, whose height was 25 cubits, and divided into several parts, over which were battlements of 2 cubits, and turrets all round of 3 cubits high, insomuch that the entire height added together amounted to fourscore cubits. The second tower, which he named from his brother Phasaelus, had its breadth and its height equal, each of them 40 cubits, over which was its solid height of 40 cubits; over which a cloister went round about whose height was 10 cubits, and it was covered from enemies by breastworks and bulwarks. There was also built over that cloister another tower, parted into magnificent rooms, and a place for bathing, so that this tower wanted nothing that might make it appear to be a royal palace It was also adorned with battlements and turrets, more than was the foregoing, and the entire altitude was about 90 cubits, the appearance of it resembled the Tower of Pharos, which exhibited a fire to such as sailed to Alexandria, but was much larger than it in compass This was now converted to a house, where Simon exercised his tyrannical authority The third tower was Mariamne, for that was the queen's name it was solid as high as 20 cubits, its breadth and its length were 20 cubits, and were equal to each other its upper buildings were more magnificent, and had greater variety, than the other towers had, for the King thought it most proper for him to adorn that which was denominated from his wife better than those denominated from men, as those were built stronger than this that bore his wife's name The entire height of this tower was 50 cubits

'4 Now as these towers were so very tall, they appeared much taller by the place on which they stood, for that very old wall wherein they were was built on a high hill, and was itself a kind of elevation that was still 30 cubits taller, over which were the towers situated, and thereby were made much higher to appearance The largeness also of the stones was wonderful, for they were not made of common small stones, nor of such large ones only as men could carry, but they were of white marble cut out of the rock, each one was 20 cubits in length, and 10 in breadth, and 5 in depth They were so exactly united to one another that each tower looked like one entire rock of stone, so growing naturally, and afterward cut

by the hands of the artificers into their present shape and corners, so little, or not at all, did their joints or connection appear Now as these towers were themselves on the north side of the wall, the King had a palace inwardly thereto adjoined, which exceeds all my ability to describe it, for it was so very curious as to want no cost nor skill in its construction, but was entirely walled about to the height of 30 cubits, and was adorned with towers at equal distances, and with large bed chambers, that would contain beds for a hundred guests apiece, in which the variety of the stones is not to be expressed, for a large quantity of those that were rare of that kind was collected together Their roofs were also wonderful, both for the length of the beams and the splendour of their ornaments The number of the rooms was also very great, and the variety of the figures that were about them was prodigious, their furniture was complete, and the greatest part of the vessels that were put in them were of silver and gold. There were besides many porticoes, one beyond another, round about, and in each of these porticoes curious pillars, yet were all the courts that were exposed to the air everywhere green There were moreover several groves of trees, and long walks through them, with deep canals, and cisterns, that in several parts were filled with brazen statues, through which the water ran out There were withal many dove-courts of tame pigeons about the canals But indeed it is not possible to give a complete description of these palaces, and the very remembrance of them is a torment to one, as putting one in mind what vastly rich buildings that fire which was kindled by the robbers had consumed, for these were not burnt by the Romans, but by these internal plotters, as we have already related, in the beginning of their rebellion. That fire began at the tower of Antonia, and went on to the palaces, and consumed the upper parts of the three towers themselves'—'Wars of the Jews,' Book V, chap iv

The chief authorities on this question are Robinson, Williams, Lewin, De Vogué, Tobler, Fergusson, while Sir Charles Wilson, Sir Charles Warren and Captain Conder have also published the views which result from their examination of the city.

First as regards the natural features of the site Sion has been supposed by Robinson, Williams, Lewin, and De Vogué to be identical with the Upper City of Josephus—the hill traditionally called Sion since the fourth century Colonel Warren, on the other hand, identifies Sion with Akra, and supposes it to have been north of the Tyropœon Valley, while Fergusson identifies it with the Temple Hill Captain Conder, while placing the 'stronghold of Sion' in the Upper City, has proposed to reconcile these various views by regarding Sion as a general and poetic title ('the sunny mountain'), applying to the whole site of Jerusalem as known before the Captivity

Akra, the site of the Lower City, is placed by Robinson in the vicinity of the present Church of the Holy Sepulchre, and Captain Conder has adopted the same view By Williams, Lewin, and De Vogué, the

name is applied to the slopes rather further east, and Lewin distinguishes this name from the Akra of the Macedonian garrison, which he places at the north-west angle of the modern Haram. Fergusson agrees with Robinson on this point, and Sir Charles Warren follows Williams, but suggests the previous existence of a knoll south-east of the present Holy Sepulchre Church, which he supposes to have been that cut down by the Hasmoneans.

Bezetha is placed by all authorities north of the Haram; but Sir Charles Warren writes the name near the Damascus Gate, while Lewin would extend the application of the term even further west.

Moriah is supposed by most authorities to have been the Temple Hill, but Dean Stanley, and Captain Conder following his view, suppose the actual site of the sacrifice of Isaac to have been on Mount Gerizim.

The Valley of Hinnom, according to Robinson, Lewin, De Vogué, and Fergusson, is identified with the present Wâdy Rabâbeh, south of the city. Sir Charles Warren has proposed to identify it with the Kedron ravine, and other writers have suggested the Tyropœon; but the balance of opinion is in favour of the southern valley, the traditional site which is also adopted by Captain Conder.

The Fountain of En Rogel since the twelfth century has been supposed to be the present Bir Eyûb. Robinson, Lewin, and De Vogué follow this view, but M. Clermont Ganneau's discovery of the site of the Rock Zoheleth modifies this conjecture, and has led Sir Charles Warren and Captain Conder to identify En Rogel with the 'Ain Umm ed Deraj, or so-called Virgin's Fountain.

Gihon from the fourteenth century has been supposed to be the Birket Mamilla, and the Lower Gihon to be the Birket es Sultân, but the latter reservoir, as we have seen, was only constructed in the twelfth century. Robinson, Lewin, and Warren retain the traditional site of Upper Gihon, and Robinson seems to have overlooked the date of the Birket es Sultân, where he places Lower Gihon. Reland and De Vogué follow the Jewish Targums in placing Gihon at Siloam. Captain Conder places the Upper Gihon at the Virgin's Fountain, and regards the aqueduct thence as Hezekiah's work.

Bethesda, in the fourth century, was identified with the Twin

Pools, at the north-west angle of the Haram In the twelfth century the site was transferred to the present Birket Isrâil, which is now the traditional site. This tradition is accepted by Fergusson, Lewin, and others ; but Robinson points to the Virgin's Fountain The name, according to Gesenius, would mean 'House of the Stream,' and Robinson's view is accepted by Captain Conder. It is, however, possible, as Sir Charles Warren suggests, that a spring originally existed in the Tyropœon, where the Hammam esh Shefa, or 'Healing Bath,' now exists, and this would be a possible site for Bethesda.

Passing from the principal natural features to the early constructions of the Kings of Judah, we must notice The City of David, which some writers have even placed on Ophel. The early authorities identify it with Sion as being the south-west hill of Jerusalem Sir Charles Warren restricts the application to the hill near the Holy Sepulchre Church; Mr Fergusson and Captain Conder agree in supposing that both Upper and Lower City are to be included under this term, and that it represents David's Jerusalem

The First Wall.—All authorities, except Mr Fergusson, agree in drawing this eastwards from the present citadel to the Haram, including the Upper City only within its northern boundary All authorities agree also in fixing the south-west angle of this ancient line of fortification on the scarp found in the Protestant Cemetery There is considerable difference of opinion as to the southern and eastern faces of this wall, which can only be settled by further exploration. The excavations of Dr. Guthe seem, however, to show that the wall crossed the Tyropœon, not far above the Siloam Pool Sir Charles Warren's important discoveries on Ophel have proved that the wall joined the present south-east angle of the Haram, thus disposing of the conjectures of Lewin and Fergusson, who would make this wall join the Haram near the Triple Gate. Remains of towers have been found east of the so-called Tower of David, which probably belonged to the First Wall, and a steep scarp is known here to run parallel to the Street of David, on the south side of the Tyropœon Valley

Mr Fergusson, however, draws the northern part of this wall quite differently from any other authority, making it include the Holy Sepulchre Church. He places Hippicus near the present ruined tower Kalât Jâlûd (Tancred's Tower), but his view has not found favour with any subse-

quent writer Captain Conder has followed Sir Charles Warren very closely in his proposed tracing of the First Wall Other writers do not essentially differ from the authorities mentioned above in their views as to these ancient ramparts

Second Wall—The course of this wall is fiercely debated, because, if it be drawn so as to include the site of the Holy Sepulchre Church, the authenticity of that site must be relinquished, as Calvary was outside Jerusalem in the time of Christ The Second Wall was built by Solomon, and rebuilt by later kings, and by Nehemiah Josephus gives only a very short account of it, saying that it began at the Gennath Gate in the First Wall, and encompassed the north quarter extending to Antonia (5 Wars, iv. 2) The site of the Gennath Gate is unknown, and that of Antonia is disputed The advocates for the authenticity of the traditional site of the Holy Sepulchre draw the Second Wall (of which no remains have yet been recognised) in a series of angles, east of the Church, to the present north-west angle of the Haram, or to some point a little further south Canon Williams, Lewin, and Sir Charles Warren agree in this instance, all excluding the Holy Sepulchre Church Dr Robinson, on the other hand, insists on the meaning of the word (κυκλόυμενον) used by Josephus, and brings arguments to prove that the Gennath Gate was near Hippicus. He therefore draws the wall in a curve from a little east of Hippicus to the present north-west angle of the Haram, and of necessity includes the Holy Sepulchre Church within this line. He has been followed by Captain Conder, who argues that any line further east is subject to engineering and military objections Mr Fergusson draws the line of this wall from the Kalat Jâlûd, along the present north wall of Jerusalem to the Damascus Gate, and thence southwards to the west wall of the Haram In this again he is not followed by any other authority.

The Third Wall, commenced by Agrippa about 41 A.D., is of less interest than the preceding, and is very variously drawn. Traces of this wall seem still to have existed north-west of the present north-west angle of the city when Robinson first visited Jerusalem Fergusson and other earlier authorities give a very wide circuit to this wall, bringing it close up to the Tombs of the Kings (so-called), or Monument of Helena De Vogué and Lewin, on the other hand, identify it with the present

north wall of Jerusalem, but Sir Charles Warren and Captain Conder, following Robinson's indications and the distances given by Josephus, extend the Third Wall beyond the modern one on the west and north-west, and make it turn back west of Jeremiah's Grotto to the Cotton Grotto, whence they make it coincide with the present wall to the north-east angle, and thence run on the present line to join the east wall of the Haram Enclosure.

II. Site of the Temple

This question has been profoundly affected by the excavations of Sir Charles Warren. Controversialists are divided into two parties, one including Robinson, De Vogué, Warren, and Conder, who suppose that the Haram Enclosure is substantially a single building, representing the area of Herod's Temple, the other including Fergusson, Lewin, etc., who restrict the Temple area to a square of about 600 feet side in the south-west angle of the same enclosure.*

The chief argument in favour of this smaller area is the estimate given by Josephus of the size of the enclosure, as being a stadium each side (15 Ant., xi. 3); while the cloisters 'reached 400 cubits'—whether in length or height is not stated (20 Ant., x. 7). Together with Antonia, Josephus estimates the circumference at six stadia (5 Wars, v. 2). The Temple Enclosure is thus supposed to have been a square of about 600 feet side (400 cubits), and Antonia a stadium by half a stadium. The adherents of this view reject the detailed measurements contained in the Mishnah (Middoth ii. 1, v. 1, 2), which make the enclosure a square of 500 cubits, and instead of making the Court of the Women a square of 135 cubits by 135 (Midd. ii. 5), they make it 135 cubits north and south, by 35 cubits east and west, the larger measurement given in the Mishnah not being reconcilable with the supposed total of 400 cubits.

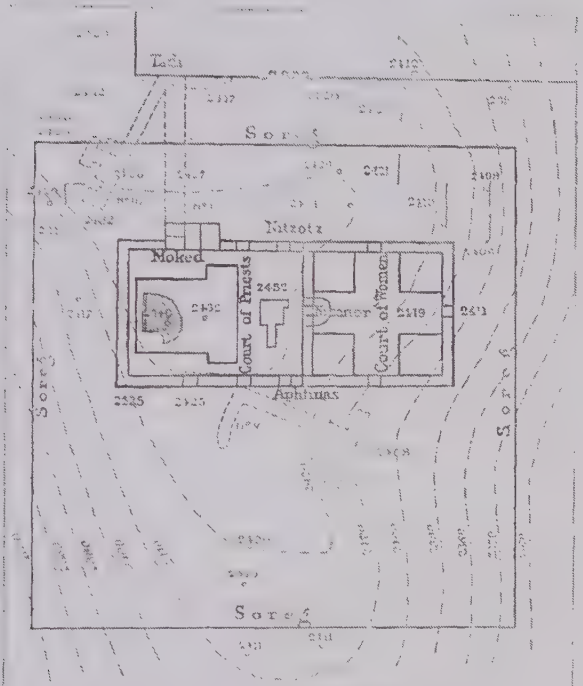
The opposite view rests chiefly on the results of exploration, as com-

* This statement is confined to the question of Herod's Temple. Of the Solomonic Temple little is known, and it must be remembered that a period elapsed between the time of Herod and that of Solomon equal to that between Queen Victoria and Alfred. It is the belief of most writers that Solomon's Palace stood on the site of the southern cloister of Herod's Temple Enclosure, and Sir Charles Warren believes the eastern part of the south wall of the Haram to be the original wall of the palace.

pared with other statements of the Mishnah and of Josephus, to the following effect. Josephus says that the cloisters reached from 'valley to valley' (15 Ant., xi. 5), and that the Ophel wall joined the eastern cloister (5 Wars, iv. 2). Sir Charles Warren's discovery of the great wall on Ophel is thus of the greatest importance, for the existing line joins the Haram walls at the south-east angle, running for some distance south in the same line with the eastern Haram wall. It thus joins the east wall of the Haram, just as Josephus says the Ophel wall joined the east cloister of Herod's Temple.

The description of Antonia (5 Wars, v. 8) standing on a lofty rock north of the Temple, with a great fosse on its north side (5 Wars, iv. 2, cf. ix. 2, and 6 Wars, i. 5, ii. 5), agrees in so remarkable a manner with the existing rock of the barracks at the north-west angle of the Haram, that De Vogué, Robinson, Wilson, Warren, and Conder, all agree in identifying this rock as the citadel of Antonia. In this case, the south-west angle of the Haram being agreed by all writers to represent the south-west angle of Herod's Temple, and the south-east and north-west angles being defined by existing ruins, the only doubtful point is the north-east angle of Herod's Temple Enclosure, which De Vogué identifies with the present north-east angle of the Haram, while Sir Charles Warren (followed by Captain Conder) places it at or near the Golden Gate, supposing the rocky scarp on the north side of the existing Platform to represent the old north wall of Herod's Enclosure, whence Antonia projected on the north-west. The adherents of this view consider Josephus to have *estimated* the area, rather than to have actually measured it, and refer the area 500 cubits square (noticed in the Mishnah) to the sacred enclosure, which no Gentile might enter, standing within the larger area, which, roughly speaking, would be a square of about 1,000 feet side.

As regards the exact position of the Holy House within this area, those who confine the Temple to an area of 600 feet side place the altar in the neighbourhood of the present fountain El Kâs, north of the Aksa Mosque. Those who consider the larger area to be clearly indicated by the results of exploration have much greater latitude in the choice of a site for the Holy House. De Vogué, following the plan given in the Mishnah, places the altar north of the Kubbet es Sakhrah. Sir Charles Warren, following the same plan, places it south, and



BLOCK PLAN OF HERODS TEMPLE.

Levels above Sea and existing remains shown thus ——

Restoration thus ——

supposes the Gate Nitzotz to have stood on the site of the Holy Rock

The latest writer on this question is Captain Conder, whose views are based on the levels of the rock in the Haram, which were determined in upwards of seventy places by Sir Charles Wilson and by Sir Charles Warren These, together with the existing surface-levels determined by Sir C. Wilson, are sufficient to allow of a contoured plan of the rock being drawn with considerable accuracy; and the existing levels may be compared with those differences of level which are given in the Mishnah, and noticed by Josephus

Captain Conder starts by accepting the tradition common to Jews, Christians, and Moslems, from the Middle Ages downwards, which identifies the Holy Rock with the Foundation-Stone of the Holy House on which the ark was placed (cf Mishnah Yoma v 2) Josephus places the Temple on the top of the hill (8 Ant. iii 9), and the Sakhrah is the highest point of rock within the Haram area, which descends in terraces all round it. Captain Conder makes the floor of the Holy of Holies on the level of the Sakhrah (2,440 feet above the sea), and shows that the other levels of the Temple Courts agree very closely with the actual levels If, however, the Temple be placed in another position, it becomes inevitable that very deep foundations should be supposed, and Captain Conder has prepared sections to show that Mr. Fergusson's plan necessitates foundations of from 30 to 90 feet deep before reaching the rock, and Sir Charles Warren's plan foundations from 25 to 100 feet; while for his own he claims that no foundations at all are needed in most parts, the levels coinciding with those actually ascertained, while the utmost difference of level is, according to his view, only 8 feet, if the Courts of the Temple were perfectly flat. The reason of these differences of section is, briefly, that unless the Temple be placed over the Sakhrah, its enclosure would occupy one slope, instead of a succession of terraces round the top of the hill

Sir Charles Warren and Captain Conder agree in identifying the great Tank No 3 (Ordnance Survey), with the Bath-House leading to the Gate Tadi (Midd i 9). Captain Conder believes Tank No 1 to be the passage from the House Moked to the Gate Tadi (Midd i 8) The latter view does not, however, agree with Sir Charles Warren's plan; and

he supposes this passage to have extended further south, and to have led to the Sakhrah rock, where he places the Gate-House Nitzotz The two Huldah Gates (Midd i 3) are supposed by De Vogué, Warren and Conder to be the existing Double and Triple Gates on the south side of the Haram, while the Prophet's Gate on the west is identified with Kipunus (Midd i 3) Fergusson supposes only the Double Gate to be intended by the 'two Huldah Gates' mentioned in the Mishnah

The places which still remain unexplored are the Gates Tadi* and Shushan, and the north-east angle of Herod's Temple If these could be found, or if explorations under the Platform of the Dome of the Rock, and the examination of the closed chambers known to exist on the north and east sides of this Platform, could be carried out, the controversies might be set at rest by actual discovery. In the present state of Moslem feeling in the East, there is, however, no hope of excavation being permitted to Christians within the area of the Haram esh Sherif

The preceding sketch will, however, enable the reader to understand the grounds of the present opinions as to the Temple of Herod, and the bearing of the Society's explorations on the subject

The following is the account of Josephus, and first, that given in the 'Antiquities,' xv 11, 3-7 .—

'So Herod took away the old foundations, and laid others, and erected the Temple upon them, being in length 100 cubits, and in height 20 additional cubits, which [twenty] upon the sinking of their foundations, fell down, and this part it was that we resolved to raise again in the days of Nero Now the Temple was built of stones that were white and strong, and each of their length was 25 cubits, their height was 8, and their breadth about 12, and the whole structure, as was also the structure of the royal cloister, was on each side much lower, but the middle was much higher, till they were visible to those that dwelt in the country for a great many furlongs, but chiefly to such as lived over-against them, and those that approached to them The Temple had doors also at the entrance, and lintels over them, of the same height with the temple itself. They were adorned with embroidered vails, with their flowers of purple, and pillars interwoven, and over these, but under the crown-work, was spread out a golden vine, with its branches hanging down from a great height, the largeness and fine work-

* Sir Charles Warren and Captain Conder both suppose that Tanks Nos 1 and 3 extend further north and meet on the line of the north wall of the modern Platform, and that the subterranean gate Tadi still remains to be found here, as shown on their plans, at the junction of the two passages

manship of which was a surprising sight to the spectators to see what vast materials there were, and with what great skill the workmanship was done. He also encompassed the entire Temple with very large cloisters, contriving them to be in a due proportion thereto, and he laid out larger sums of money upon them than had been done before him, till it seemed that no one else had so greatly adorned the Temple as he had done. There was a large wall to both the cloisters, which wall was itself the most prodigious work that was ever heard of by man. The hill was a rocky ascent, that declined by degrees towards the east parts of the city, till it came to an elevated level. This hill it was which Solomon, who was the first of our kings, by divine revelation, encompassed with a wall, it was of excellent workmanship upwards, and round the top of it. He also built a wall below, beginning at the bottom, which was encompassed by a deep valley, and at the south side he laid rocks together, and bound them one to another with lead, and included some of the inner parts, till it proceeded to a great height, and till both the largeness of the square edifice, and its altitude, were immense, and till the vastness of the stones in the front was plainly visible on the outside, yet so that the inward parts were fastened together with iron, and preserved the joints immoveable for all future times. When this work [for the foundation] was done in this manner, and joined together as part of the hill itself to the very top of it, he wrought it all into one outward surface, and filled up the hollow places which were about the wall, and made it a level on the external upper surface, and a smooth level also. This hill was walled all round, and in compass 4 furlongs, [the distance of] each angle containing in length a furlong, but within this wall, and on the very top of all, there ran another wall of stone also, having, on the east quarter, a double cloister, of the same length with the wall, in the midst of which was the temple itself. This cloister looked to the gates of the Temple, and it had been adorned by many kings in former times. And round about the entire Temple were fixed the spoils taken from barbarous nations, all these had been dedicated to the Temple by Herod, with the addition of those he had taken from the Arabians.

'Now on the north side [of the Temple] was built a citadel, whose walls were square, and strong, and of extraordinary firmness. This citadel was built by the kings of the Asamonean race, who were also high priests before Herod, and they called it the Tower, in which were reposited the vestments of the high priest, which the high priest only put on at the time when he was to offer sacrifice. These vestments King Herod kept in that place, and after his death they were under the power of the Romans, until the time of Tiberius Cæsar, under whose reign Vitellius, the President of Syria, when he once came to Jerusalem, and had been most magnificently received by the multitude, had a mind to make them some requital for the kindness they had showed him, so, upon their petition to have those holy vestments in their own power, he wrote about them to Tiberius Cæsar, who granted his request, and this then power over the sacerdotal vestments continued with the Jews till the death of King Agrippa, but after that, Cassius Longinus, who was President of Syria, and Cuspius Fadus, who was Procurator of Judea, enjoined the Jews to reposit those vestments in the Tower of Antonia, for that they ought to have them in their power, as they formerly had. However, the Jews sent ambassadors to Claudius Cæsar, to intercede with him for them, upon whose coming King Agrippa, junior, being then at Rome, asked for, and obtained, the power over them from the emperor, who gave command to Vitellius, who was then commander in Syria, to give it them accordingly. Before that time, they were kept under the seal of the high priest, and of the treasurers of the Temple, which treasurers, the day before a festival, went up to the Roman captain of the Temple guards, and viewed their own seal, and received the vest-

ments, and again, when the festival was over, they brought them to the same place, and showed the captain of the Temple guards their seal, which corresponded with his seal, and reposited them there And that these things were so, the afflictions that happened to us afterward [about them] are sufficient evidence, but for the tower itself, when Herod the king of the Jews had fortified it more firmly than before, in order to secure and guard the temple, he gratified Antonius, who was his friend, and the Roman ruler, and then gave it the name of the Tower of Antonia.

'Now in the western quarters of the enclosure of the Temple there were four gates, the first led to the king's palace, and went to a passage over the intermediate valley, two more led to the suburbs of the city, and the last led to the other city, where the road descended down into the valley by a great number of steps, and thence up again by the ascent, for the city lay over-against the Temple in the manner of a theatre, and was encompassed with a deep valley along the entire south quarter, but the fourth front of the Temple, which was southward, had indeed itself gates in its middle, as also it had the royal cloister, with three walks which reached in length from the east valley unto that on the west, for it was impossible it should reach any farther and this cloister deserves to be mentioned better than any other under the sun, for while the valley was very deep, and its bottom could not be seen, if you looked from above into the depth, this farther vastly high elevation of the cloister stood upon that height, insomuch, that if anyone looked down from the top of the battlements, or down both those altitudes, he would be giddy, while his sight could not reach to such an immense depth This cloister had pillars that stood in four rows one over against-the other all along, for the fourth row was interwoven into the wall, which [also was built of stone,] and the thickness of each pillar was such, that three men might, with their arms extended, fathom it round, and join their hands again, while its length was 27 feet with a double spiral at its basis, and the number of all the pillars [in that court] was 162 Their chapiters were made with sculptures after the Corinthian order, and caused an amazement [to the spectators,] by reason of the grandeur of the whole These four rows of pillars included three intervals for walking in the middle of this cloister, two of which walks were made parallel to each other, and were contrived after the same manner, the breadth of each of them was 30 feet, the length was 1 furlong, and the height 50 feet, but the breadth of the middle part of the cloister was one and a half of the other, and the height was double, for it was much higher than those on each side, but the roofs were adorned with deep sculptures in wood, representing many sorts of figures the middle was much higher than the rest, and the wall of the front was adorned with beams, resting upon pillars that were interwoven into it, and that front was all of polished stone, insomuch, that its fineness, to such as had not seen it, was incredible, and to such as had seen it, was greatly amazing Thus was the first enclosure, in the midst of which, and not far from it, was the second, to be gone up to by a few steps, this was encompassed by a stone wall for a partition, with an inscription, which forbade any foreigner to go in under pain of death Now, this inner enclosure had on its southern and northern quarters three gates [equally] distant one from another; but on the east quarter, towards the sunrising, there was one large gate, through which such as were pure came in, together with their wives, but the temple farther inward in that gate was not allowed to the women, but still more inward was there a third [court of the] Temple, whereinto it was not lawful for any but the priests alone to enter The Temple itself was within this, and before that Temple was the altar, upon which we offer our sacrifices and burnt-offerings to God Into none of these three did King Herod enter, for he was forbidden, because he was not a priest How-

ever, he took care of the cloisters, and the outer enclosures, and these he built in eight years

'But the Temple itself was built by the priests in a year and six months, upon which all the people were full of joy, and presently they returned thanks, in the first place to God, and in the next place for the alacrity the king had showed They feasted and celebrated this rebuilding of the temple; and for the king, he sacrificed 300 oxen to God, as did the rest, everyone according to his ability, the number of which sacrifices is not possible to be set down, for it cannot be that we should truly relate it, for at the same time with this celebration for the work about the Temple fell also the day of the king's inauguration, which he kept of an old custom as a festival, and it now coincided with the other, which coincidence of them both made the festival most illustrious

'There was also an occult passage built for the king, it led from Antonia to the inner Temple, at its eastern gate, over which he also erected for himself a tower, that he might have the opportunity of a subterraneous ascent to the Temple, in order to guard against any sedition which might be made by the people against their kings It is also reported, that during the time that the Temple was building, it did not rain in the daytime, but that the showers fell in the night, so that the work was not hindered And this our fathers have delivered to us, nor is it incredible, if anyone have regard to the manifestations of God And thus was performed the work of the rebuilding of the Temple'

Next, his description in the 'Wars,' v 5, 1-6 and 8:—

'1 Now this Temple, as I have already said, was built upon a strong hill At first the plain at the top was hardly sufficient for the holy house and the altar, for the ground about it was very uneven, and like a precipice, but when King Solomon, who was the person that built the Temple, had built a wall to it on its east side, there was then added one cloister founded on a bank cast up for it, and on other parts the Holy House stood naked But in future ages the people added new banks, and the hill became a larger plain They then broke down the wall on the north side, and took in as much as sufficed afterward for the compass of the entire Temple And when they had built walls on three sides of the Temple round about, from the bottom of the hill, and had performed a work that was greater than could be hoped for (in which work long ages were spent by them, as well as all their sacred treasures were exhausted, which were still replenished by those tributes which were sent to God from the whole habitable earth), they then encompassed their upper courts with cloisters, as well as they [afterward] did the lowest [court of the] Temple The lowest part of this was erected to the height of 300 cubits, and in some places more, yet did not the entire depth of the foundations appear, for they brought earth and filled up the valleys, as being desirous to make them on a level with the narrow streets of the city, wherein they made use of stones of 40 cubits in magnitude, for the great plenty of money they then had, and the liberality of the people, made this attempt of theirs to succeed to an incredible degree And what could not be so much as hoped for as ever to be accomplished was, by perseverance and length of time, brought to perfection

'2 Now for the works that were above these foundations, these were not unworthy of such foundations, for all the cloisters were double, and the pillars to them belonging were 25 cubits in height, and supported the cloisters These pillars were of one entire stone each

of them, and that stone was white marble, and the roofs were adorned with cedar, curiously graven The natural magnificence, and excellent polish, and the harmony of the joints in these cloisters, afforded a prospect that was very remarkable, nor was it on the outside adorned with any work of the painter or engraver The cloisters [of the outmost court] were in breadth 30 cubits, while the entire compass of it was by measure 6 furlongs, including the Tower of Antonia, those entire courts that were exposed to the air were laid with stones of all sorts When you go through these [first] cloisters, unto the second [court of the] Temple, there was a partition made of stone all round, whose height was three cubits Its construction was very elegant, upon it stood pillars, at equal distances from one another, declaring the law of purity, some in Greek, and some in Roman letters That no foreigner should go within that Sanctuary, for that second [court of the] Temple was called the Sanctuary, and was ascended to by fourteen steps from the first court This court was four-square, and had a wall about it peculiar to itself, the height of its buildings, although it were on the outside 40 cubits, was hidden by the steps, and on the inside that height was but 25 cubits, for it being built over against a higher part of the hill with steps, it was no farther to be entirely discerned within, being covered by the hill itself Beyond these fourteen steps there was the distance of 10 cubits this was all plain, whence there were other steps, each of 5 cubits apiece, that led to the gates, which gates on the north and south sides were eight, on each of those sides four, and of necessity two on the east For since there was a partition built for the women on that side, as the proper place wherein they were to worship, there was a necessity for a second gate for them, this gate was cut out of its wall, over-against the first gate There was also on the other sides one southern and one northern gate, through which was a passage into the court of the women, for as to the other gates, the women were not allowed to pass through them, nor when they went through their own gate could they go beyond their own wall This place was allotted to the women of our own countries, and of other countries, provided they were of the same nation, and that equally, the western side of this court had no gate at all, but the wall was built entire on that side But then the cloisters which were betwixt the gates extended from the wall inward, before the chambers, for they were supported by very fine and large pillars These cloisters were single, and, excepting in their magnitude, were no way inferior to those of the lower court

'3 Now nine of these gates were on every side covered over with gold and silver, as were the jambs of their doors and their lintels, but there was one gate that was without the [inward court of] the Holy House, which was of Corinthian brass, and greatly excelled those that were only covered over with silver and gold Each gate had two doors, whose height was severally 30 cubits, and their breadth 15 However, they had large spaces within of 30 cubits, and had on each side-rooms, and those, both in breadth and in length, built like towers, and their height was above 40 cubits Two pillars did also support these rooms, and were in circumference 12 cubits Now the magnitudes of the other gates were equal one to another, but that over the Corinthian Gate, which opened on the east over against the gate of the Holy House itself, was much larger, for its height was 50 cubits, and its doors were 40 cubits, and it was adorned after a most costly manner, as having much richer and thicker plates of silver and gold upon them than the other These nine gates had the silver and gold poured upon them by Alexander the father of Tiberius Now there were fifteen steps, which led away from the wall of the court of the women to this greater gate, whereas those that led thither from the other gates were five steps shorter

'4 As to the Holy House itself, which was placed in the midst [of the inmost court,]

that most sacred place of the Temple, it was ascended to by twelve steps, and in front its height and its breadth were equal, and each 100 cubits, though it was behind 40 cubits narrower, for on its front it had what may be styled shoulders on each side, that passed 20 cubits further Its first gate was 70 cubits high, and 25 cubits broad but this gate had no doors, for it represented the universal visibility of heaven, and that it cannot be excluded from any place Its front was covered with gold all over, and through it the first part of the house, that was more inward, did all of it appear, which, as it was very large, so did all the parts about the inward gate appear to shine to those that saw them, but then, as the entire house was divided into two parts within, it was only the first part of it that was open to our view Its height extended all along to 90 cubits in height, and its length was 50 cubits, and its breadth 20 But that gate which was at this end of the first part of the house was, as we have already observed, all over covered with gold, as was its whole wall about it, it had also golden vines above it, from which clusters of grapes hung as tall as a man's height But then this house, as it was divided into two parts, the inner part was lower than the appearance of the outer, and had golden doors of 55 cubits altitude, and 16 in breadth, but before these doors there was a veil of equal largeness with the doors It was a Babylonian curtain, embroidered with blue, and fine linen, and scarlet and purple, and of a contexture that was truly wonderful Nor was this mixture of colours without its mystical interpretation, but was a kind of image of the universe, for by the scarlet there seemed to be enigmatically signified fire, by the fine flax the earth, by the blue the air, and by the purple the sea, two of them having their colours the foundation of this resemblance, but the fine flax and the purple have their own origin for that foundation, the earth producing the one, and the sea the other This curtain had also embroidered upon it all that was mystical in the heavens, excepting that of the [twelve] signs representing living creatures

'5 When any person entered into the Temple, its floor received them This part of the Temple therefore was in height 60 cubits, and its length the same, whereas its breadth was but 20 cubits but still that 60 cubits in length was divided again, and the first part of it was cut off at 30 cubits, and had in it three things that were very wonderful and famous among all mankind, the candlestick, the table [of shew-bread], and the altar of incense Now the seven lamps signify the seven planets, for so many there were springing out of the candlestick Now the twelve loaves that were upon the table signified the circle of the zodiac and the year, but the altar of incense, by its thirteen kinds of sweet-smelling spices with which the sea replenished it, signified that God is the Possessor of all things that are both in the uninhabitable and habitable parts of the earth, and that they are all to be dedicated to His use But the inmost part of the Temple of all was of 20 cubits This was also separated from the outer part by a veil In this there was nothing at all It was inaccessible and inviolable, and not to be seen by any; and was called the Holy of Holies Now, about the sides of the lower part of the Temple there were little houses, with passages out of one into another there were a great many of them, and they were of three stories high, there were also entrances on each side into them from the gate of the Temple But the superior part of the Temple had no such little houses any farther, because the Temple was there narrower, and 40 cubits higher, and of a smaller body than the lower parts of it Thus we collect that the whole height, including the sixty cubits from the floor, amounted to 100 cubits

'6 Now the outward face of the Temple in its front wanted nothing that was likely to surprise either men's minds or their eyes, for it was covered all over with plates of gold of great weight, and, at the first rising of the sun, reflected back a very fiery splendour, and

made those who forced themselves to look upon it to turn their eyes away, just as they would have done at the sun's own rays But this Temple appeared to strangers, when they were coming to it at a distance, like a mountain covered with snow, for, as to those parts of it that were not gilt, they were exceeding white On its top it had spikes with sharp points, to prevent any pollution of it by birds sitting upon it Of its stones some of them were 45 cubits in length, 5 in height, and 6 in breadth Before this Temple stood the altar, 15 cubits high, and equal both in length and breadth, each of which dimensions was 50 cubits The figure it was built in was a square, and it had corners like horns, and the passage up to it was by an insensible acclivity It was formed without any iron tool, nor did any such iron tool so much as touch it at any time There was also a wall of partition, about a cubit in height, made of fine stones, and so as to be grateful to the sight; this encompassed the Holy House and the altar, and kept the people that were on the outside off from the priests Moreover, those that had the gonorrhœa and the leprosy were excluded out of the city entirely, women, also, when their courses were upon them, were shut out of the Temple, nor, when they were free from that impurity, were they allowed to go beyond the limit before mentioned, men, also, that were not thoroughly pure, were prohibited to come into the inner [court of the] Temple, nay, the priests themselves that were not pure were prohibited to come into it also

'8 Now, as to the Tower of Antonia, it was situated at the corner of two cloisters of the court of the Temple, of that on the west, and that on the north, it was erected upon a rock of 50 cubits in height, and was on a great precipice, it was the work of King Herod wherein he demonstrated his natural magnanimity In the first place, the rock itself was covered over with smooth pieces of stone, from its foundation, both for ornament, and that any one who would either try to get up or to go down it might not be able to hold his feet upon it Next to this, and before you come to the edifice of the tower itself, there was a wall 3 cubits high but within that wall all the space of the Tower of Antonia itself was built upon, to the height of 40 cubits The inward parts had the largeness and form of a palace, it being parted into all kinds of rooms and other conveniences, such as courts, and places for bathing, and broad spaces for camps, insomuch that, by having all conveniences that cities wanted, it might seem to be composed of several cities, but by its magnificence it seemed a palace; and as the entire structure resembled that of a tower, it contained also four other distinct towers at its four corners, whereof the others were but 50 cubits high, whereas that which lay upon the south-east corner was 70 cubits high, that from thence the whole Temple might be viewed, but on the corner, where it joined to the two cloisters of the Temple, it had passages down to them both, through which the guard (for there always lay in this tower a Roman legion) went several ways among the cloisters, with their arms, on the Jewish festivals, in order to watch the people, that they might not there attempt to make any innovations; for the Temple was a fortress that guarded the city, as was the Tower of Antonia a guard to the Temple, and in that tower were the guards of those three. There was also a peculiar fortress belonging to the upper city, which was Herod's palace, but, for the hill Bezetha, it was divided from the Tower of Antonia, as we have already told you, and as that hill on which the Tower of Antonia stood was the highest of these three, so did it adjoin to the new city, and was the only place that hindered the sight of the Temple on the north And this shall suffice at present to have spoken about the city and the walls about it, because I have proposed to myself to make a more accurate description of it elsewhere'

The following is the Talmudic account contained in the tract of the Mishnah called Middoth or 'Measurements' The translation is that of the late Bishop Barclay, corrected by Dr Chaplin from comparison of various Hebrew texts.

'CHAPTER I

'1 The priests guarded the sanctuary in three places, in the House Abtinas, in the House Nitzus, and in the House Moked, and the Levites in twenty-one places, five at the five gates of the Mountain of the House, four at its four corners inside, five at the five gates of the Court, four at its four corners outside, and one in the chamber of the Offering, and one in the chamber of the Veil, and one behind the House of Atonement.

'2 The Captain of the Mountain of the House went round to every watch in succession with torches flaming before him, and to every guard who was not standing, the Captain said, "Peace be to thee" If it appeared that he slept, he beat him with his staff, and he had permission to set fire to his coat And they said, "What is the voice in the Court?" "It is the voice of the Levite being beaten, and his garments burned, because he slept on his guard" Rabbi Eliezer, the son of Jacob, said, "Once they found the brother of my mother asleep, and they burned his coat"

'3 There were five gates to the Mountain of the House, two Huldah gates in the south, which served for going in and out, Kipunus in the west served for going in and out, Tadi in the north served for no (ordinary) purpose Upon the east gate was portrayed Shushan, the Palace Through it the high priest went forth who burned the heifer, and all his assistants, to the Mount of Olives

'4 In the court were seven gates—three in the north, and three in the south, and one in the east That in the south was called the Gate of Flaming, the second after it, the Gate of Offering, the third after it, the Water Gate That in the east was the Gate Nicanor And this gate had two chambers, one on the right, and one on the left, one the chamber of Phineas, the vestment keeper, and the other the chamber of the pancake maker.

'5 And the Gate Nitzus on the north was a kind of cloister (exhedra) with a room built over it, where the priests kept ward above, and the Levites below, and it had a door into the Chel Second to it was the Gate of the Offering Third, the House Moked

'6 In the House Moked were four chambers opening as small apartments into a hall—two in the Holy place, and two in the Unconsecrated place, and pointed pieces separated between the Holy and the Unconsecrated And what was their use? The south-west chamber was the chamber for offering The south-east was the chamber for the shew bread In the north-east chamber the children of the Asmoneans deposited the stones of the altar which the Greek kings had defiled In the north-west chamber they descended to the bath house

'7 To the House Moked were two doors, one open to the Chel, and one open to the court Said Rabbi Judah, "The one open to the court had a wicket, through which they went in to sweep the court"

'8 The House Moked was arched, and spacious, and surrounded with stone divans, and the elders of the Courses slept there with the keys of the court in their hands, and also the young priests each with his coat on the ground

'9 And there was a place a cubit square with a tablet of marble, and to it was fastened a ring, and a chain upon which the keys were suspended When the time approached for locking the gates, the priest lifted up the tablet by the ring, and took the keys from the chain and locked inside, and the Levites remained outside When he had finished locking, he returned the keys to the chain, and the tablet to its place, laid his coat over it, and fell asleep If sudden defilement happened to one of them, he went out and passed along the gallery that ran under the sanctuary, and candles flamed on either side, until he came to the bath house Rabbi Eleazar, the son of Jacob, says, "In the gallery that went under the Chel, he passed out through Tadi"

'CHAPTER II

'1 The Mountain of the House was 500 cubits square. The largest space was on the south, the second on the east, the third on the north, and the least westward In the place largest in measurement was held most service

'2 All who entered the Mountain of the House entered on the right-hand side, and went round, and passed out on the left, except to whomsoever an accident occurred, he turned to the left "Why do you go to the left?" "I am in mourning" "He that dwelleth in this House comfort thee" "I am excommunicate" "He that dwelleth in this House put in thy heart [repentance], and they shall receive thee" The words of Rabbi Meier To him said Rabbi José, "Thou hast acted as though they had transgressed against him in judgment, but 'may He that dwelleth in this House put it in thy heart that thou hearken to the words of thy neighbours, and they shall receive thee'"

'3 Inside of the [Mountain of the House] was a reticulated wall, 10 hand-breadths high, and in it were thirteen breaches, broken down by the Greek kings The [Jews] restored and fenced them, and decreed before them thirteen acts of obeisance Inside of it was the Chel, 10 cubits broad, and twelve steps were there The height of each step was ½ cubit, and the breadth ½ cubit All the steps there were in height ½ cubit, and in breadth ½ cubit, except those of the porch All the doors there were in height 20 cubits, and in breadth 10 cubits, except that of the porch All the gateways there had doors, except that of the porch All the gates there had lintels, except Tadi, there two stones inclined one upon the other All the gates there were transformed into gold, except the Gate Nicanor, because to it happened a wonder, though some said, "Because its brass glittered like gold"

'4 And all the walls there were high, except the eastern wall, that the priest who burned the heifer might stand on the top of the Mount of Olives and look straight into the door of the Sanctuary when he sprinkled the blood.

'5 The court of the women was 135 cubits in length, by 135 in breadth And in its four corners were four chambers, each 40 cubits square, and they had no roofs, and so they will be in future, as is said, "Then He brought me forth into the utter court, and caused me to pass by the four corners of the court, and, behold, in every corner of the court there was a court In the four corners of the court there were courts smoking, and why smoking? because they were roofless" (Ezekiel xlvi 21) And what was their use? The south east one was the chamber of the Nazarites, for there the Nazarites cooked their peace offerings, and polled their hair, and cast it under the pot The north-east was the chamber for the wood, and there the priests with blemishes gathered out the worm-eaten wood And every stick in which a worm was found was unlawful for the altar The north-west was the chamber

for the lepers · The south-west? Rabbi Eleazar, the son of Jacob, said, "I forget for what it served" Abashaul said, "There they put wine and oil" It was called the chamber of the house of oil And it was flat at first, but they surrounded it with lattice-work, that the women might see from above and the men from beneath, lest they should be mixed And fifteen steps corresponding to the fifteen steps in the Psalms (Ps cxx—cxxxiv) ascended from it to the court of Israel, upon them the Levites chanted They were not angular, but deflected like the half of a round threshing-floor

'6 And under the Court of Israel were chambers open to the court of the women There the Levites deposited their harps, and psalteries, and cymbals, and all instruments of music. The Court of Israel was 135 cubits long, and 11 broad, and likewise the court of the priests was 135 cubits long, and 11 broad And pointed pieces separated the Court of Israel from the court of the priests. Rabbi Eleazar, the son of Jacob, said, "There was a step a cubit high, and the pulpit" (cf Neh viii 4, Ezra i 9, 42) "was placed over it And in it were three steps each ½ cubit in height" We find that the priests' court was 2½ cubits higher than the Court of Israel The whole court was 187 cubits in length, and 135 cubits in breadth, and the thirteen places for bowing were there Abajose, the son of Chanan, said, "in front of the thirteen gates" In the south near to the west were the upper gate, the gate of flaming, the gate of the firstborn, the water-gate And why is it called the water-gate? Because through it they bring bottles of water for pouring out during the feast of Tabernacles. Rabbi Eleazar, the son of Jacob, said, "Through it the water proceeded out, and in future it will issue from under the threshold of the house" And there were opposite to them in the north, near to the west, the Gate of Jochania, the gate of the offering, the gate of the women, the gate of music And "why was it called the Gate of Jochania?" "Because through it Jochania went out in his captivity" In the east was the Gate Nicanor, and in it were two wickets, one on the right, and one on the left, and two in the west, which were nameless

'CHAPTER III

'1 The altar was 32 cubits square It ascended a cubit and receded a cubit This was the foundation It remains 30 cubits square It ascended 5 cubits and receded 1 cubit This is the circuit (or compass) It remains 28 cubits square It ascended 3 cubits and receded 1 cubit, this was the place of the horns It remains 26 cubits square The place of the path for the feet of the priests was a cubit on each side The hearth remains 24 cubits square Rabbi José said, "At first it was only 28 cubits square" It receded and ascended until the hearth remained 20 cubits square, but when the children of the captivity came up, they added to it 4 cubits on the north, and 4 cubits on the west, like a gamma it is said, and the altar was 12 cubits long by 12 broad, being a square. One might say it was only "a square of twelve," as is said. Upon its four sides we learn that it measured from the middle 12 cubits to every side And a line of red paint girdled it in the midst to separate the blood sprinkled above from the blood sprinkled below And the foundation was a perfect walk along on the north side, and all along on the west, but it wanted in the south 1 cubit, and in the east 1 cubit

'2 And in the south-western corner were two holes as two thin nostrils, that the blood poured upon the western and southern foundation should run into them, and it commingled in a canal and flowed out into the Kidron.

'3 Below in the pavement in the same corner there was a place a cubit square, with a

marble tablet, and a ring fastened in it Through it they descended to the sewer and cleansed it And there was a sloping ascent to the south of the altar, 32 cubits long by 16 broad In its western side was a closet, where they put the birds unmeet for the sin-offering

'4 The stones of the sloping ascent and the stones of the altar were from the Valley of Bethcerem And they digged deeper than virgin soil, and brought from thence perfect stones over which iron was not lifted up For iron defiles everything by touching and scratching In any of them a scratch defiled, but the others were lawful And they whitewashed them twice in the year, once at the passover, and once at the feast of Tabernacles And the Sanctuary [was whitewashed] once at the passover The Rabbi said, "Every Friday evening they whitewashed them with a mop on account of the blood" They did not plaster it with an iron trowel, "mayhap it will touch and defile" Since iron is made to shorten the days of man, and the altar is made to lengthen the days of man, it is not lawful that what shortens should be waved over what lengthens

'5 And there were rings to the northern side of the altar, six rows of four each, though some say four rows of six each Upon them the priests slaughtered the holy beasts The slaughter-house was at the north side of the altar And in it were eight dwarf pillars with square planks of cedar-wood over them And in them were fastened iron hooks—three rows to each pillar Upon them they hung up [the bodies,] and skinned them upon marble tables between the pillars

'6 The laver was between the porch and the altar, but inclined more to the south Between the porch and the altar were 22 cubits, and there were twelve steps The height of each step was ½ cubit, and its breadth a cubit—a cubit—a cubit—a landing 3 cubits—a cubit—a cubit and a landing 3 cubits And the upper one a cubit—a cubit, and the landing 4 cubits Rabbi Jehudah said, "The upper one a cubit—a cubit, and the landing 5 cubits"

'7 The doorway of the porch was 40 cubits high, and 20 broad Over it were five carved oak beams The lower one extended beyond the doorway a cubit on either side The one over it extended a cubit on either side It follows that the uppermost was 30 cubits, and between each one there was a row of stones

'8 And beams of cedar were fixed from the wall of the Temple to the wall of the porch, lest it should bulge And in the roof of the porch were fastened golden chains, upon which the young priests climbed up, and saw the crowns As it is said, "And the crowns shall be to Helem, and to Tobijah, and to Jedaiah, and to Hen, the son of Zephaniah, for a memorial in the Temple of the Lord" And over the doorway of the Temple was a golden vine supported upon the buttresses Every one who vowed a leaf, or a berry, or a cluster, he brought it and hung it upon it Said Rabbi Eleazar, the son of Zadok, "It is a fact, and there were numbered three hundred priests to keep it bright"

'CHAPTER IV

'1 The doorway of the Temple was 20 cubits in height, and 10 in breadth And it had four doors, two within and two without, as is said, "Two doors to the Temple and the Holy Place" The outside [doors] opened into the doorway to cover the thickness of the wall, and the inside doors opened into the Temple to cover [the space] behind the doors, because the whole house was overlaid with gold excepting behind the doors Rabbi Judah said, "They stood in the middle of the doorway, and they were in a manner turned back and folded behind themselves 2½ cubits, and those 2½ cubits, ½ cubit the jamb on this side, and ½ cubit

the jamb on the other side" It is said, "Two doors to two doors folding back, two leaves to one door and two leaves to the other"

'2 And the great gate had two wickets, one in the north, and one in the south Through the one in the south no man ever entered And with regard to it Ezekiel declared, as is said, "The Lord said unto me This gate shall be shut, it shall not be opened, and no man shall enter in by it, because the Lord, the God of Israel, hath entered in by it, therefore it shall be shut" The priest took the key, and opened the wicket, and went into the little chamber, and from the chamber to the Temple Rabbi Judah said, "He went in the thickness of the wall, until he found himself standing between the two gates, and he opened the outside gates from inside, and the inside from outside"

'3 And there were 38 little chambers, fifteen in the north, fifteen in the south, and eight in the west The northern and southern ones were [placed] five over five, and five over them, and in the west three over three, and two over them To each were three doors one to the little chamber on the right, one to the little chamber on the left, and one to the little chamber over it And in the north-eastern corner were five gates one to the little chamber on the right, and one to the little chamber over it, and one to the gallery, and one to the wicket, and one to the Temple

'4 The lowest row was five cubits, and the roofing six cubits, and the middle row six, and the roofing seven, and the upper was seven, as is said, "The nethermost chamber was 5 cubits broad, and the middle 6 cubits broad, and the third 7 cubits broad"

'5 And a gallery ascended from the north-eastern corner to the south-western corner Through it they went up to the roofs of the little chambers. One went up in the gallery with his face to the west So he proceeded all along the northern side, till he reached the west On reaching the west, he turned his face southward, going along the west side, till he reached the south On reaching the south, he turned his face to the east, he went along the south side till he arrived at the door of the upper story, because the door of the upper story opened in the south side And at the door of the upper story were two cedar beams By them they went up to the roof of the upper story, and on its summit pointed pieces separated between the Holy and the Holy of Holies And in the attic, trapdoors opened to the Holy of Holies Through them they let down the workmen in boxes, lest they should feast their eyes in the Holy of Holies

'6 The Temple measured 100 cubits, and its height 100 The foundation 6 cubits, and the height [of the wall] 40 cubits, and the string course 1 cubit, and the rain channel 2 cubits, and the beams 1 cubit, and the covering plaster 1 cubit; and the height of the upper story was 40 cubits, and the string course 1 cubit, and the rain channel 2 cubits, and the beams 1 cubit, and the covering plaster 1 cubit, and the battlement 3 cubits, and the scarecrow 1 cubit. Rabbi Judah said, "The scarecrow was not counted in the measurement, but the battlement was 4 cubits"

'7 From east to west there were 100 cubits, the wall of the porch 5, and the porch 11, and the wall of the Temple 6, and the interior 40, and the partition space [between the Vails] 1, and the Holy of Holies 20 cubits The wall of the Temple was 6, and the little chamber 6, and the wall of the little chamber 5 From north to south there were 70 [cubits,] the wall of the gallery 5, the gallery 3, the wall of the little chamber 5, the little chamber 6, the wall of the Temple 6, its interior 20, the wall of the Temple 6, the little chamber 6, the wall of the little chamber 5, the place for the descent of the water 3, and the wall 5 cubits The porch was extended beyond it 15 cubits in the north, and 15 in the south, and this

space was called "The House of the Instruments of Slaughter," because the knives were there deposited And the Temple was narrow behind and broad in front, and it was like a lion, as is said, "Ho! Ariel, the city where David dwelt, as a lion is narrow behind and broad in front, so the Sanctuary is narrow behind and broad in front"

'CHAPTER V

'1 The length of the whole court was 187 cubits The breadth 135 From east to west 187 The place for the tread of the feet of Israel was 11 cubits The place for the tread of the priests 11 cubits The altar 32 Between the porch and the altar 22 cubits The Temple 100 cubits, and 11 cubits behind the House of Atonement (or Temple)

'2 From north to south there were 135 cubits The sloping ascent and the altar 62 From the altar to the rings 8 cubits The space for the rings 24. From the rings to the tables 4 From the tables to the pillars 4. From the pillars to the wall of the court 8 cubits And the remainder between the sloping ascent and the wall, and the place of the pillars

'3 In the court were 6 chambers, three in the north, and three in the south In the north, the chamber of salt, the chamber of Parva, the chamber of washers In the chamber of salt they added salt to the offerings In the chamber of Parva they salted the skins of the offerings, and upon its roof was the bath house for the high priest on the day of atonement In the chamber of washers they cleansed the inwards of the offerings, and from thence a gallery extended up to the top of the house of Parva

'4 In the south were the chamber of wood, the chamber of the draw-well, and the chamber of hewn stone The chamber of wood, said Rabbi Eleazar, the son of Jacob, "I forget for what it served" Abashaul said, "The chamber of the high priest was behind them both, and the roof of the three chambers was even In the chamber of the captivity was sunk the well with the wheel attached to it, and from thence water was supplied to the whole court In the chamber of Hewn Stone the great Sanhedrin of Israel sat, and judged the priesthood, and the priest in whom defilement was discovered, clothed in black, and veiled in black, went out and departed, and when no defilement was found in him, clothed in white, and veiled in white, he went in and served with his brethren the priests And they made a feast day, because no defilement was found in the seed of Aaron the Priest, and thus they said, "Blessed be the Place Blessed be He, since no defilement is found in the seed of Aaron And blessed be He who has chosen Aaron and his sons to stand and minister before the Lord in the House of the Holy of Holies"'

III The Holy Sepulchre and Calvary.

It is agreed by all authorities that the Sepulchre and the site of the Crucifixion were close together, and that both were outside the walls of Jerusalem at the time of the Crucifixion There is, however, a double controversy on this subject First, as regards the true site of the Sepulchre and Calvary Secondly, as regards the site of the Church built by Constantine over what he supposed to be the true sites. Williams,

Fergusson, and De Vogué agree in supposing that the true site was known in Constantine's time; Captain Conder follows Robinson in supposing that the true site was not then known All authorities, however, with the exception of Mr Fergusson, have agreed that Constantine's Basilica stood on the same site with the present Holy Sepulchre Church, while Mr. Fergusson points to the Sakhrah, or Holy Rock, in the Haram, as the tomb round which Constantine built his Martyrium, and supposes that the traditional site was transferred from this spot to the present traditional locality in the eleventh century, about 1030 A D., or rather later

First, as regards the true site of the Holy Sepulchre, it must be noted that we have no account of the locality after that contained in the Gospels until the year 326 A D. Secondly, it should be remembered that wherever the second wall may have been, the present site of the Holy Sepulchre was, according to every authority, within the Third Wall, which was commenced (to include the undefended suburbs) only eleven years after the Crucifixion This would seem to lead to the supposition that the present site was already surrounded by houses at the time of the Crucifixion, in which case Jewish law (Mishnah Baba Bathra, II. 9) would have forbidden entombment on the spot The arguments of Chateaubriand and Williams in favour of the site having been known in the fourth century, should be read with those of Robinson against such a supposition, but there is no literary evidence between the years 31 and 326 A D, when Helena, mother of Constantine, is said to have recovered the true site.

Captain Conder has recently proposed to accept the existing Jewish tradition, which identifies the cliff above the grotto of Jeremiah with the place of public execution called 'House of Stoning' in the Mishnah (Sanhedrin, VI 1). He points to a single Jewish tomb west of this cliff as a possible site of the Holy Sepulchre, and this view, besides having tradition in its favour, has, moreover, the advantage that this site is without the limits of the Third Wall as restored by De Vogué, Warren, Lewin, and other recent authorities.

We must now turn to the most curious and interesting of all the existing controversies, namely, that which refers to the position of the buildings erected by Constantine over the sites which he supposed to be those of the Holy Sepulchre and of the Calvary Mount

All writers who have published their views since 1847 have agreed in supposing that Constantine's sites were the same now covered by the Cathedral of the Holy Sepulchre, with exception of Mr J. Fergusson, who points to the Dome of the Rock as being the Martyrium of Constantine, and to the Golden Gate as representing the propylea of Constantine's Basilica Robinson, Williams, Lewin, Willis, De Vogué, Warren, Conder, and others, although differing in other points, agree in rejecting Mr Fergusson's view, and since it was first proposed no author has published any work in its favour Mr Fergusson is nevertheless still convinced (as shown by his publication of the 'Temples of the Jews,' in 1878) of the truth of his theory, and believes that it will finally obtain acceptance

The main ground of Mr. Fergusson's belief is found in the architectural style of the two buildings just mentioned—the Golden Gate and the Dome of the Rock. These he states to be evidently Christian work of the fourth century, and he compares them to existing buildings of that age in Rome and at Spalatro, contrasting them also with the later work of Justinian in St Sophia at Constantinople Mr Fergusson rejects the statement of the Paschal Chronicle, repeated by other early writers, that Constantine's buildings were destroyed in 614 A.D, and he applies to Constantine's work the descriptions of Arculphus, Willibald, and Bernard, in the seventh, eighth, and ninth centuries Mr Fergusson rejects the evidence of the inscriptions of 'Abd el Melek and Mamûn as being forgeries of the eleventh century A D He likewise rejects the testimony of the Arab writers of the fifteenth century (Mejr ed Din, Jelál ed Din, Kemal ed Din) as representing only Moslem tradition of the origin of the buildings, and he claims to be supported by the Christian descriptions of the Holy Sites in the fourth century and the seventh He places architectural evidence before all other, and it was from architectural considerations that his theory first arose.

With respect to this architectural evidence it must, however, be noticed that his views are controverted by the Duc de Vogué, on the ground that the Christian buildings in the Hauran and in Palestine itself lead to quite a different conclusion as to the dates of the older existing buildings in the Haram area. He compares the Golden Gate with a gateway at el Barah (belonging to the sixth century A D), and contrasts it with

Constantine's Basilica at Bethlehem, the style of which he pronounces to be earlier and purer (cf 'Temple de Jerusalem,' p 68) He accordingly attributes the Golden Gate to the Emperor Justinian, while he accepts the evidence of inscriptions and of Arab writers as proving that the Dome of the Rock was built by Abd el Melek in 688 A D , although the columns used to support the dome were taken, he believes, from Christian buildings of Constantine or of Justinian

With regard to the Dome of the Rock, the Byzantine style of its mosaics is not disputed by those who suppose it to be the work of 'Abd el Melek. They account for it by supposing Byzantine builders to have been employed, as in other cases of buildings erected by the early Arab Khalifs, and they point to the Sassanian architecture of Persia—which has much in common with Byzantine style—as being more truly illustrative of the Jerusalem building than are any existing remains of the work of Constantine They also insist on the improbability that the great Cufic inscription of 72 A H , the eight inscriptions of El Mamûn, and the Karmatic inscription in the dome itself, should be forgeries in different styles of writing, all attributable to the eleventh century at earliest

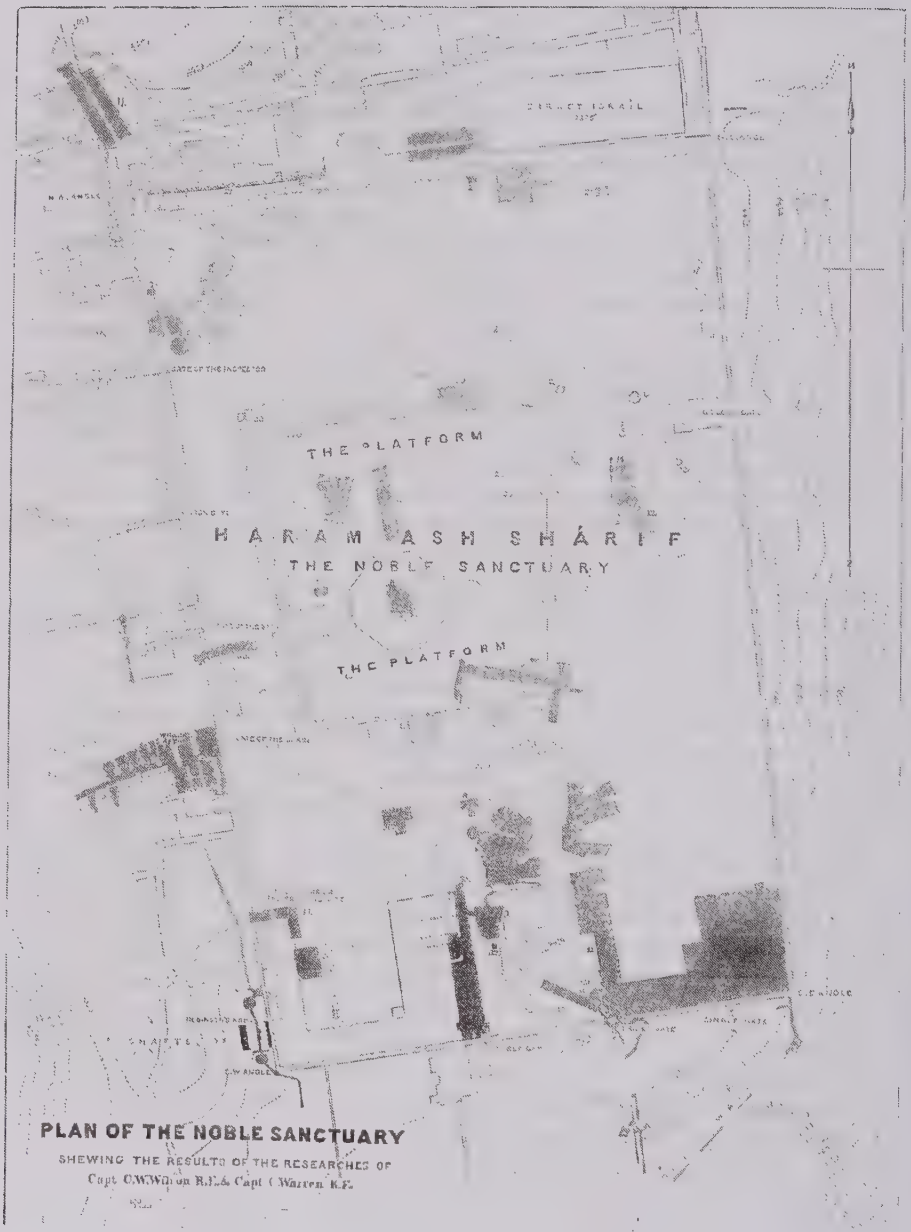
With some difference of detail, Willis and De Vogué agree in restoring the buildings of Constantine on the site of the present Cathedral of the Holy Sepulchre. The plan so drawn is similar to that of the Bethlehem Basilica, also built by Constantine, consisting of an atrium, narthex, basilica, and apse, in which the tomb itself stood, with propylea opening on the east, of which remains are supposed still to exist in a row of pillar shafts.

All writers except Mr. Fergusson agree in crediting the destruction of Constantine's work in 614 A D , as related by a contemporary writer in the Paschal or Alexandrine Chronicle, also by Antiochus, then Abbot of St Saba, and repeated by the later writers, Theophanes and Eutychius ('Annales,' II., p. 213) They also all agree in supposing the accounts of Arculphus, Willibald, and Bernard to refer to the chapels built by Modestus on the same site, and they consider the descriptions of these writers, together with those of the Bordeaux Pilgrim, of Eusebius, and Eucherius, clearly to indicate that Constantine's sites were the same now shown As regards the transference of tradition supposed by Mr. Fergusson, it may be admitted that several sites certainly were trans-

ferred in the twelfth century to new localities, but at the time when Mr Fergusson supposes the transference of Calvary and the Holy Sepulchre to have been effected (1031-1048 A D), pilgrimages were very numerous, and Eutychius, in the tenth century ('Annales,' II, pp 421-429), appears already to refer to the Holy Sepulchre Church as distinct from the Dome of the Rock He says that a new dome was erected over the Church of the Sepulchre in the reign of el Mamûn (813-832 A D), which was higher than the Dome of the Mosque, which was repaired by the same Khalif

Without wishing to do more than indicate the various opinions held on this question, it may be remarked that, if the view of De Vogué and Warren as to the extent of the Temple Enclosure be accepted, it becomes impossible to place the real site of the Holy Sepulchre at the Sakhrah Rock, which, according to the traditions which Captain Conder has endeavoured to show to be reliable, was the Foundation-Stone of the Holy of Holies It also becomes improbable that this site could have been that supposed by Constantine to be the true one because the statue of Hadrian, beside the *lapis pertusus*, was still standing in the time of Jerome, and supposed to mark the site of the Jewish Temple. Mr Fergusson, however, denies that the *lapis pertusus*, or 'pierced stone' was the present Sakhrah, and also denies that the Sakhrah purified by Omar was the present Holy Rock A Moslem transference of tradition, as well as a Christian one, must therefore have occurred if Mr Fergusson is correct in his contention The literary evidence has long ago been canvassed and exhausted, but it is much to be desired that a competent architectural authority should pronounce an opinion, independent and unbiased, on the architectural evidence on which Mr Fergusson's theory mainly rests It will, however, be clear from these notes that the discoveries of Colonel Warren, and the surveys of Colonel Sir C Wilson, have profoundly affected those great questions of Jerusalem topography concerning which differences of opinion still exist

C R C



PLAN OF THE NOBLE SANCTUARY

SHEWING THE RESULTS OF THE RESEARCHES OF
Capt. C.W.Wilson R.E.& Capt C.Warren R.E.

PART I.

EXPLORATIONS IN JERUSALEM.

The Ordnance Survey of Jerusalem was executed by Captain (now Colonel Sir Charles) Wilson, in 1864, and published in 1865, with special plans of the Haram Enclosure, and of the Church of the Holy Sepulchre, and a folio of notes and plans. Fourteen excavations were carried out under Captain Wilson's direction, as detailed in the 'Ordnance Survey Notes.' (See 'Explorations since 1869') The results were mainly negative, but were valuable as dispelling various erroneous opinions concerning the ancient topography of the city.

The labours of Captain (now Colonel Sir Charles) Warren commenced in the spring of 1867, and he left Jaffa on 13th April, 1870. His excavations were carried on under difficulties of every kind, in face of the opposition of the local government, and in spite of continual fevers, and of lack of funds. The mines were driven to extraordinary depths, one at the south-east angle of the Haram being 80 feet deep, and another near the north-east angle being 120 feet beneath the surface, where it reached the rock. In consequence of the great depths, the scarcity of mining frames, and the treacherous character of the *débris* through which the shafts and galleries were driven, the work was one of unusual danger and delicacy, requiring much courage and determination. Colonel Warren and the non-commissioned officers of his staff worked constantly with their lives in their hands, and often undertook operations from which the native workmen recoiled. The prudence and discipline of the party, however, secured valu-

able discoveries without accident, and it is generally acknowledged that the results are of an importance which fully repays the labour and difficulty of the operations

Colonel Warren's excavations include. 1st, Those outside the walls of the Haram, 2nd, Those in the city itself, 3rd, Explorations in the vicinity of Jerusalem, which are noticed in Part II. of the present volume. The points on the Haram wall which were specially examined include the *West Wall* at Wilson's Arch, at the Prophet's Gate, and at the south-west angle, where the pier of the great Tyropœon Bridge was discovered, the *South Wall*, west of the Double Gateway, at the Single Gateway, and at the south-east angle, the *East Wall*, at the south-east angle and near the north-east angle.

The excavations in the city itself include the examination of the East wall of the city near St Stephen's Gate, of the Birket Isrâil, and of the Twin Pools and their aqueduct at the north-west angle of the Haram Excavations were also made in the Muristan, and at the Damascus Gate; at the so-called Gennath Gate south of David Street, in the street called *el Wâd*, near the Damascus Gate, while the great Ophel wall was discovered and examined south of the Haram, together with the channels under the Triple Gate.

The Haram Cisterns, which are enumerated in the Ordnance Survey Notes, were explored also by Colonel Warren, and the level of the rock in their roofs was determined, so that the original contour of the hill of the Sanctuary is now delineated with considerable accuracy.

Outside the city the great shaft at the Virgin's Fountain (see 'Ain Umm ed Deraj in Part II.), and the Kedron aqueduct (see Bir Eyûb), were discovered and explored The old aqueduct on Sion was also discovered by Colonel Warren. (See Birket es Sultân.)

Various explorations since 1869 are detailed in completion of Colonel Warren's account of his excavations, those beyond the boundaries of the modern city walls being enumerated in Part II of this volume

The High Sanctuary

The Haram esh Sherif, or High Sanctuary, is a quadrangle of about 35 acres in area, or one-sixth of the total area of modern Jerusalem. The

angles at the south-west and north-east corners are right angles, and the south-east angle is 92° 30′ The true bearing of the east wall is 352° 30′ (general direction) The length of the south wall is 922 feet on the level of the interior. The west wall is 1,601 feet long, the east wall, 1,530 feet. The north boundary for 350 feet is formed by a scarp of rock 30 feet high, projecting at the north-west of the Haram

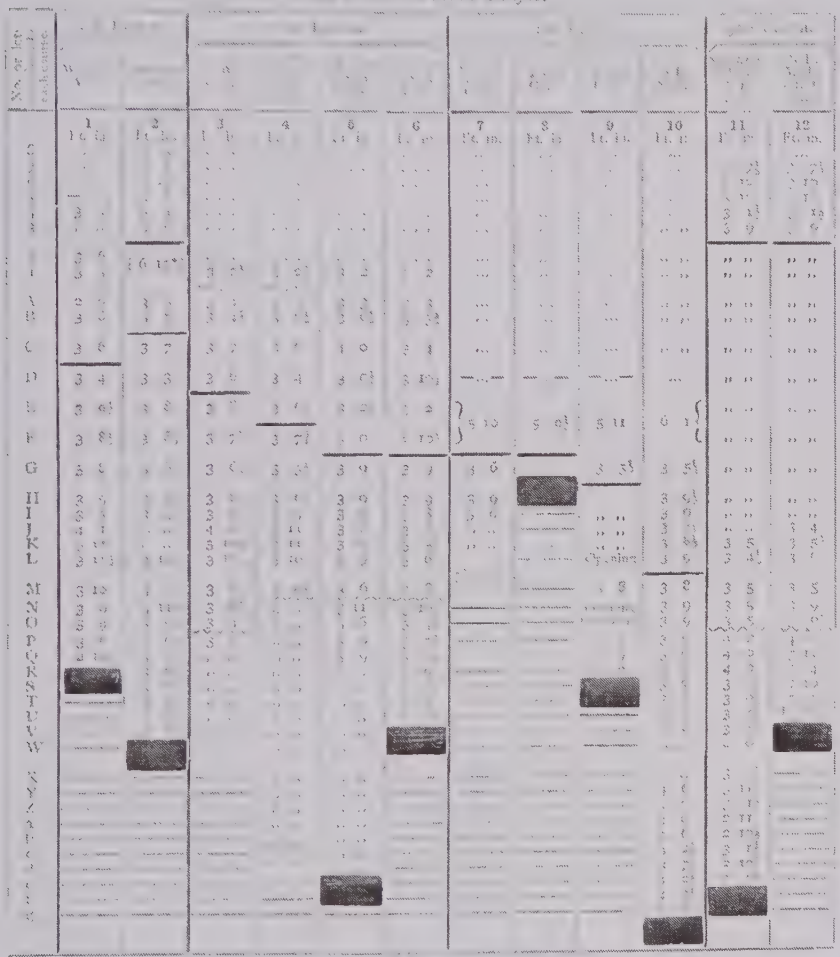
The modern gateways giving entrance to the interior are eleven in number; three on the north and eight on the west Of the ancient gateways there were two on the south, now called the Double and Triple Gates, while east of the latter is the mediæval entrance known as the Single Gate, beneath which Colonel Warren discovered a passage. On the east wall is the Golden Gate, now closed, and two small posterns, in the modern masonry, are found south of this portal On the west wall the Prophet's Gateway (sometimes called Barclay's Gate) is recognised as the southern of the two Parbar (or Suburban) Gates, mentioned in the Talmud; while the northern Suburban Gate appears to have been converted into a tank, and lies immediately west of the Dome of the Rock (This is Tank No 30, Ordnance Survey.)

The raised platform in the middle of the Haram Enclosure has an area of about 5 acres, and is an irregular quadrangle The Kubbet es Sakhrah, or Dome of the Rock, on this platform covers the sacred rock, which rises 5 feet above the floor of the building, the crest being at the level 2,440 feet above the Mediterranean The Dome of the Chain is immediately to the east of the Kubbet es Sakhrah.

The Jamiâ el Aksa, or 'distant mosque' (that is, distant from Mecca), is on the south, reaching to the outer wall The whole enclosure of the Haram is called by Moslem writers Masjid el Aksa, 'praying-place of the Aksa,' from this mosque

For convenience of comparison, Colonel Warren has attached a letter to each course of the ancient masonry of the Haram walls, and as these are often referred to in his account of his discoveries, the following table is prefixed to explain the lettering :

Return showing the height of courses in the Sanctuary wall as exposed on surface and in the several shafts.



The levels given in Colonel Warren's papers and plans are elevations in feet above the Mediterranean, depending on the bench-marks of the Ordnance Survey, and on the line of levels run by Colonel Wilson from Jaffa to Jerusalem.

EXCAVATIONS ROUND THE NOBLE SANCTUARY,

1867—1870

From East End of Rock Scarp to Birket Israil

No rock or wall is visible, the ground being covered with houses. There are two gateways leading out from the Sanctuary to the Tarik Bab Sitti Maryam the Bab al 'Atm ('Obscurity'), also called by Mejr ed Din the Bab al Dawater; and the Bab Hytta ('Pardon'), which is also said by the same writer to derive its name from the command to the Israelites to ask pardon when they entered.

It is to be remarked that the Bab al 'Atm ('Obscurity') corresponds in its name to the northern gate of the Temple, Tadi ('Obscurity')

The Birket Israil.

This great reservoir is about 360 feet long, 126 feet wide, and 80 feet deep. It extends along the northern side of the Sanctuary from the north-east angle, and is perpendicular to the line of the east wall Its eastern end is dammed up by the natural rise of the rock in that direction, and by a dam thereon 46 feet wide, forming a portion of the old east wall of the city, which extends without break beyond the north-east angle of the Sanctuary (Plates VI. and XVI)

The pool lies across a valley which commences to the north of the city wall, east of the Damascus Gate, and passes down between the high ground of the Mamuniyeh to the west and the Church of St. Anne to the east It runs into the Kedron past the Sanctuary wall, at a distance of

145 feet south of the north-east angle. This valley is only just perceptible at the present time, being filled up in parts to a depth of 125 feet, and in the Sanctuary it is filled up about 140 feet

The south wall of the pool is thus of masonry, the north wall also is probably mostly of masonry, the west wall is rock, and the east wall is partly rock and partly masonry The pool is filled up with rubbish to a height of from 37 to 50 feet, strongly impregnated by sewage, its bottom has only been seen at one point—20 feet from the south side, and 158 feet from the east side. It is uncertain therefore yet whether the rocky floor is excavated or whether it is stepped up

The bed of the pool at the point exposed is covered with a very hard concrete 16½ inches thick, made of alternate layers of small stones and mortar, and floated over with 2½ inches of very hard and compact plaster of cement and pottery, at a level of 2,325, the level of the Sanctuary above being 2,413 feet.

The south wall of the pool is the north wall of the Sanctuary.

The walls of the pool are lined with small squared stones set with wide joints, packed with angular stones, in order to give the cement facing a better hold.

The south side of the pool was examined below the rubbish and found to be precisely similar to that seen above

This lining probably covers the ancient masonry of the Noble Sanctuary on the north.

There are two vaulted parallel passages leading into the western end of the pool they are of modern masonry, and are built for the support of the houses above. (See Plate XVI) The crowns of these vaults are slightly pointed, are nearly on a level with the surface of the Noble Sanctuary, and their sides are cemented over

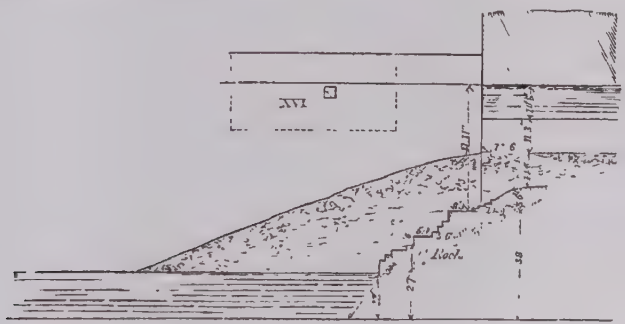
The southern passage is 21 feet wide and 134 feet long, it is closed at its western end by a wall.

The northern passage is 21 feet wide and 118 feet long, and opens into a small arched passage, running north and south, of modern construction, and used as a sewer

These vaults are nearly filled up with sewage and rubbish. The rock surface falls from the western ends near the crowns of the arches to east, until, at the entrance to the pool, it is about 40 feet below the crowns

A shaft was sunk through the rubbish under the northern vault, at the entrance to the pool, and at a depth of 14 feet 6 inches a floor of concrete was found.

The floor has a slope towards the entrance, where there are four stone steps 16 inches broad and 7 inches in height, the bottom step is nearly flush with the west wall of the pool, and from this step to crown of the arch is 49 feet, beyond this there is a landing 8 feet broad, and then a drop of 4 feet. Attempts were made to get through the concrete at this point, but the instruments could make no impression on it, the gallery was then driven down along the face of the concrete to the east, which is found to consist of irregular steps. (See woodcut). The concrete



was followed down until, at a point 22 feet above the bottom of the pool, the rubbish was found to be in too loose a state to work through, and the gallery has been discontinued; it is probable that in any case we could not have continued more than a foot or two deeper, on account of the water in the pool

The masonry at the eastern end of the pool is about 45 feet thick, and its lower portion is part of, and in continuation of, the ancient masonry forming the Sanctuary east wall There are two conduits leading out of the pool, one at a level of about 2,390 feet (described under Shaft *H*, 10), the other appears to be the original outlet to the pool, and requires a full description It was discovered in May, 1869, when driving the gallery along the so-called Tower of Antonia on east side It runs east

and west, is 3 feet 9 inches high and about 2 feet wide. (See Plate XVI.) Its western end is closed by a perforated stone having three round holes, each 5½ inches in diameter, and below these there appears to have been a basin to collect water. At its eastern end it opens out through the Sanctuary wall. There are three openings on the east side, at Courses *J*, *N* and *P*. The upper opening at *P* is to throw light upon the passage, is 3 inches high, and runs along the width of the passage.

The floor of this light shaft falls about one in one, and opens through

the roof of the conduit upon the doorway of a staircase leading into the conduit through the solid wall from above.

This staircase entrance is in Course *N*, and is about 12 feet from east side of dam. The staircase was jammed up with rubbish and stones, and attempts were made to clear it out, but after getting up 28 feet the danger became so great that it had to be abandoned. The staircase is very steep, at an angle of one in one, and appears to have been cut out of the solid after the wall was built.

The roof of the conduit is the bottom of Course *M*. The stones are

of large size, from 14 to 16 feet in length, and vary from 4 feet 6 inches to 3 feet 10 inches in height

The actual height of the conduit is about 12 feet, but the rubbish from the staircase has nearly choked it up in the centre. The roof is stepped down 4 feet at about 11 feet from the western end The appearance of this passage seemed to be similar to that discovered under the Single Gate in October, 1867, and it is evident that it was built at the same time as the wall or dam, and taking the perforated stone as the level of the overflow, the level of the water in the pool could not have stood higher than 2,347 feet, that of the floor of the pool being 2 325 feet, thus giving an original depth of 22 feet to the water in Birket Israil

The old floor of the conduit has been torn up, apparently at some comparatively recent period, for the purpose of letting the water out at a somewhat lower level, and for this purpose an irregular hole has been knocked through the wall at Course *P*, but a portion of the ancient exit for the water can still be seen at the bottom of Course *O*, where there is a neatly cut channel about 5 inches square

A roughly built masonry shaft has been constructed around on the outside of the opening from Course *M* to Course *P*, and there is a rough drain about 2 feet high and 9 inches wide to carry away the water to east. (See Plate XVI)

These alterations are of a very rough description, appear to be of recent date, and the workmen have left their mark on the wall in the shape of a Christian cross of the Byzantine type

The top of the dam serves as a road from St. Stephen's Gate to the Sanctuary.

St Stephen's Gate to Golden Gate, Including North-East Angle of Noble Sanctuary.

The eastern wall of the Noble Sanctuary is terminated on the north above ground by the so-called Tower of Antonia, which measures on the surface of the ground 83 feet 10 inches from north to south.

The north-east angle of this tower is the north-east angle of the Noble Sanctuary From this north-east angle to St. Stephen's Gate, the wall

forming the east side of the Birket Israil is built (above the surface of the ground) with small-sized stones having no marginal draft, and between the wall and the masonry of the north-east angle above ground there is a straight joint, but near the rock the old wall continues past the north-east angle, forming the eastern side of the Birket Israil (See page 122.)

In the Tower of Antonia there are five complete courses of large marginal-drafted stones still *in situ*, and at the northern end there are eleven courses above the surface, reaching to a height of about 40 feet The height of each course averages 3 feet 7½ inches, and the marginal drafts vary from 4½ to 5½ inches

The stones are similar to those in the Wailing Place, and are of considerable weight, one being over 24 feet in length. The remainder of the tower, up to a height of 45 feet from the surface, is built of small squared stones of more than one date, apparently Saracenic

It may be pointed out that the production on plan of the wall of the tower falls upon the junction of the wall with the Golden Gate, and if still further produced, coincides with the wall running north from the south-east angle for some distance.

It is thus apparent that the foundation of the east wall is in one line, although the superstructure as now seen above ground has more than one bend in its length

It would appear, from what is seen on surface and the results of excavation, that between the Tower of Antonia and the Golden Gate the ancient masonry was composed of large stones with marginal drafts and rough projecting faces, from foundations to a level with the sill of the Golden Gate, while those of the Tower itself have rough projecting faces only as high as Course *P*, and above that the stones are dressed as those in the Wailing Place. (See Plates XII.—XIV.)

The present surface of the ground is nearly level from St. Stephen's Gate to the Golden Gate, but beneath the surface the ground falls steeply and rises again, forming the mouth of the valley which runs south through the Birket Israil.

The excavations made by the Palestine Exploration Fund about the north-east angle are pronounced by Sir Charles Wilson to be without parallel in the history of excavation.

The deepest shaft struck the rock at a depth of 125 feet below the surface, and in one shaft alone no less than 600 feet run of shaft and gallery was excavated The results of these excavations will now be given.

Shaft D, South-east Angle of so-called Tower of Antonia

The 'Castle of Antonia,' as it is popularly called, appears on the surface of the ground to be of separate construction to the Sanctuary wall to the south of it, and projects 7 feet beyond it The tower is formed of stones with marginal drafts like those at the Wailing Place, while the wall to the south is formed of marginal drafted stones with rough projecting faces On arriving at the angle of this tower in the gallery (level 2,363 feet 3 inches), about 42 feet below the surface it was found that the projection of the tower only amounted to 2 feet; and though the stones of the tower were like those at the Wailing Place, and those to south of it had rough projecting faces, yet at this point these two different faces were cut on one and the same stone, the stone being cut back from 2 to 4 feet, at the angle of the tower No doubt at no great distance above the gallery the stones are bonded together like those to be seen above ground

As the courses of the wall are set back from 4 to 7 inches, while the same courses in the tower are set back only about 1½ inches, this projection of the tower gradually diminishes until at the sixth course (*P*) it disappears altogether It will be found that the rate of diminution of the projection of the tower, of from 7 to 2 feet, from the surface to the level of gallery (42 feet), is similar to that from the level of the gallery to the top of Course *P* From this point down to the rock the wall and tower are in one and the same line, the stones in each course setting back about 4 to 5 inches (Plates XII—XIV)

The twenty-one courses in this shaft average about 3 feet 5 inches in height, and vary from 2 feet 7 inches to 4 feet The marginal drafts average about 4 to 5 inches All the faces of the stones above Course *P* are much worn The face of the stones in Course *X* was very faulty, and its irregularities were filled up with small stones and mortar, rendered on the outside to look like stone.

On the third course from the rock (Course *c*) some red painted characters were found. The face of the stone was not dressed, but in the working of it a large piece had split off, leaving a smooth face, and on this the characters were painted. In one case the letter appeared to have been painted on before the stone was laid, as the trickling from the paint was on the upper side (Plates XIII—XV. and XXI.)

Notes on Soil, Etc

Commenced 7th July, 1869, on the level 2,363 feet 3 inches. At first the soil was good, with here and there some very large cut stones which required breaking up. Subsequently loose stone-chippings were met with. At a depth of 45 feet (level 2,318 feet) red earth mixed with small stones was met with.

Along the top of the sixteenth course (*Z*), which is set out 7½ inches, at level 2,310 feet 7 inches (?), was found a small drain, similar to that found on the top of the same course in Shaft *A*, *B*, *C*. It was 6½ inches deep and 5 inches wide, and could be examined for 10 feet to the south To the north it was found to run into a small catch-pit or tank, 5 feet 7 inches deep, 2 feet 9 inches from north to south, and 3 feet from east to west, situated about 1 foot 6 inches from the Sanctuary wall. It was covered with a piece of stone flagging much cracked and shaken. The sides of the tank were rendered with plaster, but no pottery intermixed. The inlet for the water was in the north-east corner, and the outlet in the south-west corner of the tank The duct leading into the tank was 1 foot 4 inches wide. There was a deposit of mud 12 inches deep in the tank.

At a depth of 54 feet (level 2,309 feet), 4 feet of stone-chippings were met with. The rock was reached at a depth of 70 feet 6 inches (level 2,292 feet 9 inches) The rock rises abruptly to the north, about 8 feet in the width of the shaft.

Gallery along East Wall of Sanctuary.

Commenced 5th June, 1869. From a point (*p*) 18 feet south of the north-east angle, a gallery was driven along the wall (level 2,363 feet 3

inches) to north, past where the straight joint between the Castle of Antonia and city wall should occur, but no straight joint was found to exist. The wall runs on without a break of any kind, and there is no projection. At 26 feet (or 6 feet beyond the north-east angle) was found the light shaft to overflow aqueduct, described on page 126. As far as 33 feet the soil was good, then stone chippings with layers of concrete were encountered to a distance of 58 feet, and at 64 feet a concrete floor ascending to north. To a distance of 65 feet the stones were all like those at the Wailing Place, but beyond this to 75 feet they had rough projecting faces (projections about 6 to 10 inches) with well-cut marginal drafts. It is to be observed that this wall was traced considerably beyond the point where the massive wall in Shaft 11 was found, and therefore the two walls do not appear to be connected. In consequence of the proximity of the graveyard above, no attempt could be made to examine the wall nearer the surface than 2,363 feet 3 inches.

From the point (*b*) the gallery was driven to south (at level 2,363 feet 3 inches) to the southern angle of the tower (where Shaft *D* was sunk), and continued along the wall of the Sanctuary to the south. (See Plate XIII.)

In the tower the stones were like those at the Wailing Place, while in the wall they have rough projecting faces.

Shaft E, 14th June, 1869.—The southern side of shaft was 66 feet 6 inches north of the southern angle of the tower on the level 2,363 feet 3 inches. It was sunk through black earth mixed with chips of stones, about 12 inches cube, with a few larger stones which required to be broken up. At 11 feet 6 inches it came on two pieces of flagging 2 feet 6 inches square and 7 inches thick, with the dressed sides downwards. At level of 2,346 feet the soil changed to stone chippings, which continued until the rock was reached at level of 2,327 feet 3 inches.

The stones in Courses *K* to *O* were much worn, but like those at the Wailing Place, but below from Course *P* to *T* the stones had the usual marginal drafts, with rough projecting faces (see Plate XIII). The rock steps down steeply to south.

Record of the Shafts A B C, South of the so-called Tower of Antonia

In speaking of this shaft, the projecting southern angle of the tower (of Antonia) at the north-east angle of the Sanctuary (at the level 2,363 feet 3 inches) is taken as the point of departure. This shaft was commenced the 1st December, 1869, at the level 2 363 feet 3 inches, its southern edge being 63 feet south of the angle of the tower, and it was kept close alongside the Sanctuary wall, the width of the shaft was 3 feet

In consequence of the projecting faces of the stones of the wall, and the set-off of from 3 to 5 inches on each course, the sinking of this shaft so close to the wall was barely practicable, and after arriving at a depth of 60 feet it was found necessary to run a gallery north and south, and to commence fresh shafts for the further depths from this gallery

The shafts *A*, *B*, and *C* had their three southern edges respectively at distances of 104 feet 6 inches, 72 feet 6 inches, and 45 feet from the angle of the tower, and were continued until the rock was reached in each case In the following record there is first an account of the earth passed through in the second shafts and gallery, then a description of the wall, and, finally, some remarks on the manner in which the stones were let into the rock. The deductions arrived at will be spoken of when the whole of the work at the north-east angle is considered

Nature of Soil in Shafts A, B, C

1st December, 1869—Commenced on level 2,363 feet 3 inches Southern edge of shaft, 63 feet south of the angle of the tower.

The stones of the Sanctuary wall have rough marginal drafts, and rough faces projecting from 10 to 16 inches. The soil was black, firm and good to a depth of 17 feet 6 inches (level of 2,345 feet 9 inches), then loose earth among large broken stones, some of them rough-hewn, others well-dressed with marginal drafts. These stones were of various sizes, from 12 inches to 2 feet 6 inches cube, some of them were of large size, over 4 feet in length Not a particle of earth was to be found among these

at about 28 feet depth. This work was of a very dangerous and difficult nature, and occupied the party until 11th December

At 31 feet (level 2,332 feet 3 inches) these stones and chippings terminated, and to 36 feet (level 2,327 feet 3 inches) alternate layers of black soil and small stones were met with, like an old surface soil—each layer of earth about 6 inches thick, and each layer of stone about 9 inches thick

Very loose chippings of stone without any earth were now met with to a depth of 50 feet (level 2,313 feet 3 inches) The size of the stones was from 3 inches to 9 inches cube

19th December.—Passed through solid black earth, sloping in layers to the east until 56 feet (level 2307 feet 3 inches), when a layer, 3 inches thick, of red clay mixed with stones was reached, sloping down to east

At 53 feet (level 2,310 feet 3 inches) a small drain was found, 4 inches wide, and 5 inches deep, running along the Sanctuary wall on top of Course *Z*, evidently the same drain that was met with in the shaft at the angle of tower, it was made of small stones and mortar, which had become very hard, having apparently been mixed with oil Below this drain several pieces of *tessera* were found, they are similar to those found about Jerusalem, supposed to be Roman Several specimens were sent to England, they have a high polish

Taking advantage of the solid nature of the soil above this layer of clay, a gallery was driven north and south along the Sanctuary wall at a level of 2,302 feet 9 inches, to act as a landing for the earth brought up from the deeper shafts To the north for 20 feet this gallery was driven through hard black earth To the south for 40 feet the gallery passed through hard black earth sloping to south, on the top of this was earth mixed with small chippings sloping to south 1 in 20, and above that again a layer of chippings falling to south 1 in 4 Three shafts (A, B, C) were sunk along the Sanctuary wall to the rock from this gallery.

Shaft B.—28th December.—Distance of southern side of shaft from angle of tower, 72 feet 6 inches (level 2,302 feet 9 inches) Sunk through 2 feet of black soil, and then through loose stones and earth, with some broken pieces of pottery intermixed to a level of 2,296 feet, then through 2 feet of stone chippings, stones about 3 inches cube, with a little earth, the layer falling to north Thence through stones and wet earth to a total

depth of 80 feet (level 2,283 feet 3 inches), on 1st January, 1870, when the rock was found sloping to the north.

In the gallery driven along the rock to the north, some large stones were encountered lying in the wet mud

Shaft C.—12th January 1870.—Distance of southern edge of shaft from angle of tower, 45 feet (level 2,302 feet 9 inches) Two feet of stone chippings were met with, and then firm dark soil to a depth of 10 feet 6 inches (2,292 feet 3 inches), when stone chippings were met with for 3 feet, resting on the rock, which was found at 2,289 feet, sloping rapidly to south, and stepped down for the reception of the stones of the wall.

A gallery was driven to south along wall to meet that from Shaft *B*. On the rock lying in the wet mud were found large masses of rough stones, which do not appear to have been dressed, and above these stones layers of stone chippings.

Shaft A.—2nd February, 1870.—Distance of southern side of shaft from angle of tower, 104 feet 6 inches (level 2,302 feet 9 inches) Sunk through 18 inches of hard black soil, then through a layer of blue clay without stone or grit in it, from 9 inches to 12 inches thick, and sloping to east and south 1 in 12 Underneath this was a layer of stone chippings, very hard on top, like concrete, then layers of stone chippings and earth until rock was met with at a depth of 2,289 feet east of the wall, and at 2,286 at the wall.

Wall of Sanctuary, Shafts A, B, and C

The whole of the masonry laid bare in these shafts is of one description The stones have marginal drafts and rough projecting faces The courses average 3 feet 6 inches in height, and vary from 2 feet 10 inches to 4 feet in height

The drafts average about 4 to 5 inches in width, and vary from 3 inches to 7 inches The projections are of all shapes and forms, being evidently the shape of the stone as it was in the rough, they sometimes amount to 2 feet, but the average projection is about 12 inches. Each course is set back on that below it about 3 to 4 inches, but there is no constant dimension Twenty-five courses were laid bare in this shaft, viz from *K* to *Z*. and from *a* to *i*. The courses at *Z* and *a* have been partially

plastered over below the drain and *tesseræ* The total depth of this shaft from gallery to lowest stone let into rock was 85 feet (level 2,278 feet 3 inches) The ground above, on surface, is at a level 2,404, so that the *débris* covering up the wall is no less than 125 feet in depth

The extreme height of the wall as it at present exists is 166 feet, and the height of the interior of the Sanctuary at this point, above the lowest point found in the wall, is 142 feet.

On stone *U*, at level 2,326 feet, a mark was found, it is difficult to say whether it is natural or not, it was so shallow that no impression was taken on the squeeze paper

Rock Exposed in Shafts A, B, and C

These shafts were sunk for the purpose of ascertaining the position of the bottom of the ravine, across which the wall of the Sanctuary is built

The highest and lowest points of rock exposed were as follow

42 feet 6 inches south of angle of tower, at the level 2,289 feet.
61 feet „ „ „ „ „ 2,278 feet 3 inches
104 feet 6 inches „ „ „ „ „ 2,289 feet

The lowest point of the ravine thus appears to be at a distance of 61 feet south of the angle of the tower, the rock rising to north about 11 feet in 19 feet, and to south about 11 feet in 43 feet

There is, however, the possibility that the true bottom of the ravine lies still further to the south, as the rock does not slope uniformly in a given direction, but lies in a succession of gentle slopes and scarps. The only indication, however, of the bottom of the ravine lying further to south is to be found in the fact that in shaft *A* the layers of black earth and clay dip to the south

About 2 feet in front of the wall the rock is to be seen in its natural state, but at the wall itself it has been stepped and scarped for the reception of the stones

At Shaft *A* the rock is stepped down 3 feet in two steps for the reception of the foundation stone, and appears to have a fall to west. At Shaft *B* the rock is cut down about 12 inches, and falls to east At Shaft *C* there is a natural scarp about 7 feet in height where the rock is exposed,

and it is cut down in steps for the reception of the foundation stones The lowest course running through the Shafts *A*, *B* and *C* is that lettered *g*, below this the courses *h* and *z* are very irregular, and are merely formed of stones (some of them not drafted), fitted in to suit the steps cut in the rock The plans and sections show this work in detail (Plates XIV and XV)

Shaft 41 Feet South of the Tower.

This shaft, on the level 2,363 feet 3 inches, was commenced 22nd November, 1869, to expose the courses of stone in Sanctuary wall. Four courses were exposed, similar to those in the gallery, having good marginal drafts with rough projecting faces the average height of courses was 3 feet 5 inches See elevation and section (Plates XIV and XV)

Shafts N.E of the Sanctuary.

Shaft H 1 (Plate II and XVII)—At the foot of the mound of rubbish outside St Stephen's Gate, at a point about 305 feet east of the Sanctuary wall Surface, 2,343 feet above sea level Rock was found at 6 feet (2,337 feet) Commenced 2nd April, 1869, completed 24th April, 1869

At this spot some of the local Christians stated that tradition placed the site of an ancient church.

The rock, on being struck with a jumper, caved in, and a grotto was discovered, nearly circular on plan, about 9 feet in diameter and 4 feet in height It had been used as a tomb, and was divided into five *loculi* by plaster partitions about 3 inches thick and 12 inches in height. Two of these lay about north-east to south-west, and three north-west to south-east

At the southern side a shaft led down into a chamber (No 2), 20 feet 6 inches long and 6 feet broad, running north and south, divided latitudinally into ten *loculi*, separated as in the chamber above, one of the middle *loculi* served as a passage, opening to east and west into two chambers (Nos 3 and 4), parallel and similar to No 2 Other chambers open out from these, the largest being at the south-east angle of No. 3, where there is a shaft (about 6 feet deep) leading down into a lower range of chambers, in

direct length about 40 feet All these chambers, nine in number, are divided off into *loculi*, except one which appears to have been an anteroom, and in which some pieces of stones with marginal drafts were found

The partitions separating the *loculi* are in some cases cut out of the rock The chambers were half full of earth, fallen in from above, and it was obvious that they had been opened and examined subsequent to their use as tombs The earth was moved from one chamber into another, and search made for further chambers without result The shafts leading upwards to the surface were not examined except in one case

The work was continued for twenty-four days Six pottery lamps of the early Christian period and some glass vases were found

The chambers are cut in the *malaki*, of a very friable description, nearly approaching to the *kâkûli*, and no chisel marks were found in the rock The chambers are connected with the surface by vertical shafts, somewhat on the plan of the Græco-Phœnician tombs at Sidon

Plate XVII gives a sketch plan of chambers Nos 2, 3, and 4, with a section through No. 2. The whole system of caves at this site is of so irregular a description as to suggest the idea that they are natural grottos enlarged by the hand of man

Shaft H 2 —On the north side of the road east of St Stephen's Gate, 88 feet 6 inches from the south-east corner of the Cemetery, and 104 feet from the Ordnance Survey bench mark at the bottom of the road The level of the surface is 2,369 feet 6 inches Rock was found at a level 2,364 feet. The soil 3 feet 6 inches above the rock was of the red virgin earth

Shaft H 3 —At the bottom of the road leading east from St Stephen's Gate, on the east side of the Cemetery, 70 feet 6 inches north of the bench mark above-mentioned The surface level is 2,359 feet Rock was found at the depth of 2 feet.

Shaft H 4 —On the north side of the rubbish heap outside of, and 256 feet to the east of, St Stephen's Gate, 4 feet from the south side of the road leading east Commenced 9th April, 1869 Surface, 2,390 feet. Rock, 2,369 feet 3 inches

At 14 feet a small aqueduct, or cistern, of masonry was broken into,

about 4 feet 6 inches square, and 6 feet in depth, resting on the levelled rock at 20 feet 9 inches.

For 13 feet the soil was nearly black, in layers, sloping from north to south for 11 feet, and from west to east to a depth of 13 feet, the slope being 2 in 3 Below this the colour was red, and continued so down to the rock

Shaft H 5 —Higher up the road than *H* 4, and at 162 feet from St. Stephen's Gate Commenced 9th April, 1869 Surface, 2,409 feet. Rock, 2,379 feet At 30 feet the rock was found scarped down to the east

The scarp was followed down for 20 feet, the rock receding under to the west, and plastered This was found to be the western side of a tank, the northern side was subsequently found. Large stones, apparently a portion of the vaulting, were found in the tank For the first 20 feet the soil was black and loose, apparently rubbish from the city, from thence to the rock, loam mixed with stones.

Shaft H 6.—Near the road at 109 feet east of St Stephen's Gate Commenced 12th May, 1869 Level of surface, 2,411 feet Rock, 2,388 feet 3 inches, falling one in one to the south-east At 16 feet the colour of the soil changed from black to a reddish brown. At 8 feet some pottery was found

After reaching the rock a gallery was driven to the west in search of the massive wall found in *Shaft H* 11 The rock was very soft, and rose slightly to the west 3 inches in 15 feet It is then scarped down to the west to a depth of 8 feet 4 inches, is level for 10 feet, and then rises in a step of $2\frac{1}{2}$ feet, and continues level to the west The ditch is filled in with small stones and earth. The total length of the gallery to west was 25 feet 8 inches No signs of any wall as at *Shaft H* 11 existed; but probably the gallery was not continued far enough

Shaft H 7 —At the first angle in the city wall, 43 feet north of St Stephen's Gate Level of surface, 2,419 feet. Rock, 2,400 feet 6 inches (Plate XVII) The wall below ground is similar to that above. At 18 feet the shaft came on the rock on which the wall is built. The rock is very soft and decayed, and has been made good with concrete. No appearance of any foundations more ancient than the present city wall, as seen above ground, were found The soil passed through was loose rubbish

Shaft H 8.—At a point 200 feet due east of the south corner of the tower at north-east angle of the Sanctuary. Level of surface, 2,317 feet. Rock, 2,317 feet 6 inches. Commenced 8th April, 1869. Some broken pieces of fresco on plaster were found near the rock. The soil was black for the first 8 feet, then of a brown colour, with the appearance of water having passed through with lime in suspension. A gallery was driven to the south-west to determine the inclination, but after progressing 11 feet, it had to be tamped up, in consequence of the proximity of loose shingle, which filled the gallery. The rock was found to slope to the south-east.

Shaft H 9.—At a point 40 feet higher up the hill than Shaft *H* 8. Level of surface, 2,364 feet. Rock, 2,317 feet. Commenced 30th April, 1869. It was sunk 23 feet through black earth, and then through chippings of stone, 1 to 2 inches cube, without any earth. At 43 feet the chippings changed to stones 3 to 4 inches cube, and in getting through these the chippings began to run, and it was necessary to tamp up the shaft to the level of good soil. A gallery was driven to west for 25 feet at 22 feet below the surface, and a shaft was sunk through stones 12 inches cube and mud to a depth of 25 feet. The rock falls 1 in 4 to south.

Shaft H 10.—At first angle to south of St. Stephen's Gate, at 34 feet from the gate. Level of surface, 2,410. Rock, 2,390. Commenced 5th May, 1869. The ashlar of city wall reaches to a depth of 11 feet, resting on concrete formed of stones about 6 inches cube and hard lime. Concrete rested on rock at a depth of 20 feet. The shaft was then filled up to the top of the concrete, and a sloping gallery driven to south of the city wall.

At 19 feet in the gallery a strong rough masonry wall was met with, lying east and west, about 3 feet thick, which did not reach up to the city wall by 6 feet. Within this wall to south was a pavement of rough *tesseræ*, at a level of 2,391 feet. Sergeant Birtles suggests that this was perhaps the remains of a house, the space between the rough wall and the city wall having been the doorway. Before reaching the rough wall a masonry drain, 7 inches by 6 inches in the clear, was crossed below the level of pavement.

At 38 feet the top of a barrel-drain, or aqueduct, was crossed, and at 40 feet another rough wall, and large cut stones, were found at the east side and bottom of gallery.

At 44 feet 6 inches a shaft was sunk and water found at 4½ feet below the sole of the gallery, being 33½ feet below the surface of the ground at the mouth of the shaft. The surface of rock at this point is 2,377 feet

The top of the barrel-drain was now examined; after following it 2 feet 6 inches to west it ended, and another roof of flat stones, at a rather higher level, was seen, and after 8 feet the sides of an aqueduct, running west, were visible, formed of large squared stones For the first 10 feet this passage is only 10 inches wide, after this it is 2 feet wide, the southern side being formed of large stones 3 feet 6 inches high, 4 feet 6 inches long, well squared, and exhibiting slight traces of marginal drafts The aqueduct was traced to 39 feet in all, and was blocked up by a stone having fallen down from the roof. In the roof, at about 15 feet from the entrance, a cylindrical earthenware pipe, 9 inches in diameter, was built in, apparently to conduct water from a higher level, also two other pipes, about 4 inches in diameter, were found laid horizontally *above* the stones forming the roof The aqueduct was in a very decayed state, not safe for the men to work in; it apparently leads from the Birket Israil at a level of 2,390 feet, the bottom of the pool being 2,325 feet

It seems probable that this drain, or aqueduct, is built at the northern termination of the Sanctuary wall, and that the marginal drafted stones at the south side of the drain are a portion of the north side of the old wall It is to be observed that the masonry about this portion was found to be in the most confused state, having apparently been overthrown from its foundation, or perhaps the wall never existed here The city wall could not be found in the vicinity of the drain, in the line of the wall

On account of the danger of disturbing the graves in the cemetery overhead, the work in this gallery could only be carried on with the greatest caution

Shaft H 11 —At a point about 100 feet to east of the Sanctuary wall, a little north of the north-east angle of the Sanctuary. Level of surface, 2,405 feet Rock, 2,341 Commenced 16th April, 1869 At a depth of 42 feet an aqueduct was broken through, very rough, and without plaster, the roof formed by rough stones in form of an arch, it runs in a north-westerly direction directly towards the aqueduct found in Shaft *H* 10 To the north-west 27 feet were open, and to south-east 20 feet

The shaft was continued, and at 60 feet the earth changed colour, and

rock was found at 64 feet from the surface, it is cut in steps, apparently for resting a foundation on It falls to west about 1 in 4

The shaft was filled up to the level of the aqueduct, and the clearing out of the portion towards the city wall was commenced The passage was 3 feet 6 inches high, and 1 foot 9 inches wide, the stones forming sides and roof, 3 inches thick and 6 inches long, are very rough.

At 32 feet the passage was broken in at the sides, after securing this, it was found to continue and to be filled with hard silt At 57 feet a very massive wall of bevelled stones running north and south, and 65 feet from the city wall, was reached—stones well squared and somewhat similar to those found at the Jews' Wailing Place the courses were 3 feet 7 inches in height A gallery was commenced along the wall to the north, the second stone found was not bevelled, though well squared and dressed At 18 feet from the aqueduct, the gallery being driven horizontally, the rock was struck, and the lowest course of the wall took a turn about 30 degrees north-east, while the second course continued straight on to north, the wall now was composed of small stones, and after continuing it for 8 feet farther, the gallery was tamped up by earth taken from a new gallery driven along the wall to south.

This gallery was continued to the south along the bevelled stones of the wall, at 19 feet it reached the corner stone, the wall now running to west. The stones here are very well dressed, but have a curious cracked appearance, as if they had been subjected to great heat, and they broke off in large chips when struck accidentally The wall was followed to west, and at 13 feet 6 inches the gallery came upon what appeared to be part of a rough wall running to the south, of stones about 1 foot 6 inches high and 2 feet long The main wall still went on to the west, but was now composed of very rough irregular stones of large size, the gallery was continued for 46 feet from the angle, when the wall suddenly ended, and after being continued for 7 feet farther, the gallery was stopped, and another gallery driven to south-west from the point (47 feet from the angle) where the main wall had ended.

Continuing gallery to south-west, progress was impeded by meeting with a concrete floor composed of black cement and small stones, the point where this floor was met with is 29 feet from where the gallery branched At 38 feet the miners came close on the point below the

north-east angle of the Haram wall, and broke into a gallery from *H* 12. This was done for the purpose of tamping up *H* 9 with the soil from *H* 12, to avoid taking it along the rough aqueduct, which had been an awkward business.

It does not appear that the stones of the massive wall in No. 11 are *in situ*, they differ in height, and sometimes a square stone is interpolated. It is probable that this wall was built after the aqueduct had ceased to be of use, as we find it cut in two by the wall, that is to say, if we are to suppose it to be one and the same with that found in Shaft *H* 10. Plate XVII.

General Remarks on the North-East Angle

The wall of the tower above Course *P* is similar in many respects to that at the Jews' Wailing Place, but the roughly faced wall below the Course *P* and to the south of the tower is not similar to the roughly faced portion at the south-west angle of the Sanctuary, although it would be difficult to specify exactly how it differs. The stone does not seem so hard and compact as that at the south-east angle, and the chisel-working is not so carefully done. The characters in red paint are pronounced to be Phœnician. The excavations here showed that there was a deep valley to the north of the Temple, as described by F. Josephus (Ant. xiv. iv., 2; Bel. i. vii., 3).

It appears probable that when the north-east angle was built, the earth had already accumulated in the valley, the surface being about the line of Course *P*.

It would be purely a matter of speculation entering into any discussion as to dates when the wall was built and when the several alterations took place.

The Golden Gate

The construction of the Golden Gate is still a vexed question; it is possibly a reconstruction of comparatively late date, but it stands on the ancient foundations of a gateway, which in some measure correspond with those of the Triple Gate. The level of the sill is 2,396, while that of the Triple Gate is 2,380.

The whole space in front of the east wall of the Sanctuary is occupied by Moslem tombs, and no excavations could be made near the wall except at considerable depth beneath the surface by means of galleries, and on account of the slope of the ground these galleries had to be stepped up through the loose shingle—a very hazardous and dangerous operation.

It being desirable, then, to examine the wall at the Golden Gate, the only method was to sink a shaft at some distance off and drive a gallery up, so as to be altogether out of the way of the cemetery (See Plates II and VI)

The nearest convenient point was found to be 143 feet from the south end of the gate, and in a line perpendicular to its front, in a piece of ground through which a shaft was sunk in 1867.

This point was found to be 55 feet 6 inches below the level of the ground outside the gate The shaft was commenced 25th January, 1869, and sunk down 25 feet 6 inches, giving a total difference of level between the ground outside the gate and the bottom of the shaft of 81 feet (See Plate XI)

Soil

First 8 feet, loam mixed with small shingle, from 8 feet to 13 feet in depth the shaft passed through stone packing 9 inches to 12 inches cube, from 13 feet to 18 feet good solid dark brown loam, from 18 feet to 22 feet 6 inches, stone packing again, 22 feet 6 inches to 26 feet 9 inches, loam mixed with stones.

A gallery was then driven in to the west, and at 10 feet 3 inches the rock was struck, rising about one in four to the west, the gallery then rose gently with the rock until at 18 feet 6 inches a tank or rock-cut tomb was crossed The examination of this was reserved, and the gallery continued, until at 27 feet the rock was found to present a cut scarp of 3 feet 9 inches height, on the south side, running in a north-westerly direction, the natural surface of the rock falling to the north. The scarped rock was followed for over 10 feet, when it suddenly took a turn to the north, and it was necessary to cross over it On the top of the scarp a rough masonry wall was found, which was broken through. At this point, 37 feet from the shaft, the total rise in the gallery was 8 feet

The rock is *missæ*, and on the scarp, about 2 feet 10 inches from the bottom, was found a hole cut for passing a rope through, similar to those found in the cavern south of the Triple Gate. This ring or hole was apparently for tying up animals to.

The gallery was now continued on a gradual rise through a loose and dangerous accumulation of stones. At 47 feet the rock was found to rise suddenly to a height of 4 feet, and at 53 feet another rough masonry

wall was encountered and broken through. At 68 feet a portion of the shaft of a column (3 feet in diameter) was met with, placed erect in the *débris*, and about 3 feet above the rock. (See woodcut.) On the bottom of this shaft of column are what appear to be masons' marks.

From this point forward the work became very dangerous, the gallery being driven through a mass of loose boulders alternating with layers of shingle, which on being set in motion ran like water.

At 85 feet from the shaft, the gallery had ascended 25 feet 6 inches The *débris* now began to run into the gallery, forming a cavity above, and to prevent further falls fifty old baskets were stuffed in, and a quantity of old timber After a considerable amount of labour the gallery was continued, and at 97 feet (*i e*, 46 feet from the Sanctuary wall) a massive masonry wall was reached, running north and south

An attempt was made to break through this wall, but after getting in 5 feet it was abandoned, the stones being of large size, it was also found not practicable to get over the wall, as it appeared to continue up to a considerable height A gallery was then driven south along the wall for 14 feet, but there was no appearance of any break. The *débris* pierced through was of the loosest description, and the gallery had become in a highly dangerous state It was therefore tamped up, all the frames for about 30 feet being left in

The tamping up was continued as far as the hanging column, and at the same time a branch gallery was driven to the north from a point immediately east of the column At 14 feet it was turned in to the west (See Plate IV) It was found that there were here about 3 feet of solid earth between the *débris* and the rock, and by very careful management the gallery was driven on for 34 feet from the turn At this point the massive wall was again met with, running in a north-westerly direction, the gallery followed along it, but the layer of solid earth gradually diminished in thickness, until on the 28th April, when 55 feet from the turn, the shingle suddenly came in with a rush, quickly filling up 6 feet of the gallery, and burying some of the tools An attempt to remove this shingle was of no avail, when touched it only ran farther into the gallery, and, very reluctantly, the work was abandoned.

Although the object at this point was not attained, some very interesting results were arrived at

1 It was now nearly certain that at the Golden Gate the Sanctuary wall extended below the present surface outside, to a depth of from 30 feet to 40 feet. (See Plates VI. and XI)

2 It appeared that the rock had an inclination to the north near the Golden Gate

3 The massive wall where first encountered was about 46 feet in front of the Golden Gate. It appears from thence to run to north and gradually turns in to west, apparently following the contour of the ground.

This wall is composed of large quarry-dressed blocks of *mussæ*, so far similar to the lower course seen in the Sanctuary wall near the Golden Gate, that the roughly dressed faces of the stones project about 6 inches beyond the marginal drafts, which are very rough. The stones appeared to be in courses 2 feet 6 inches in height, and over 5 feet in length On trying to break through the wall a hole was made 5 feet 6 inches deep, without any signs of the stones terminating. The horizontal joints are not close, but are about 12 inches apart, and filled in with stones 6 inches cube, packed in a very curious cement, which had the appearance of an argillaceous stone with a conchoidal fracture. The fellahin pronounced it to be formed of lime, oil, and the virgin red earth, and stated that such is used at the present day in the formation of cisterns Specimens of this cement were sent home

It appears probable that the massive wall met with may continue up to the present surface, as immediately above it in the road are some large roughly drafted stones lying in the same line.

To the south from the Golden Gate to the postern, a distance of 51 feet, there are three courses of large stones, with marginal drafts 3 inches to 6 inches wide, with rough projecting faces

The postern itself appears to be of very recent date, but possibly marks the site of Merj ed Din's gate al Burak.

Southward of this postern there are no drafted stones visible above ground until reaching Mahomet's Pillar, when the lowest courses visible are again found with marginal drafts and projecting faces similar to those near the Golden Gate, and these stones extend to a break in the wall 105 feet 6 inches from the south-east angle

An excavation was commenced 300 feet south of the Golden Gate, east of the cemetery, but when 60 feet from the Sanctuary wall the shingle became too loose to work in, and the gallery was abandoned At the south-east angle the wall was seen for a distance of 161 feet on the south side, but from that point to the Golden Gate it has nowhere been seen below the surface. Yet the inference is that it is composed of

the same marginal drafted stones with rough projecting faces as are met with in other parts of the east wall At the south-east angle, for 108 feet on east side, the stones are similar to those above Course *P* at the Tower of Antonia and at the Wailing Place

Galleries were driven in search of any pier in connection with the supposed arch near south-east angle.

The northern end of the skewback is just where the break occurs in the wall at 108 feet from the south-east angle A gallery was driven close to the rock, so as to encounter the pier if it still existed, but nothing was found as far as 50 feet from the Sanctuary wall, and the span of the arch, as calculated, should not be more than 27 feet A gallery was driven from this last to south for 14 feet at 30 feet from the Sanctuary wall, and then small galleries for about 10 feet east and west, but no signs of the supposed pier were found.

All the stones in the Sanctuary wall, from 108 feet from south-east angle to 161 feet, were found to have projecting faces and marginal drafts. (See Plate XIX)

The angle of the corner-stone of the base course is 92 degrees 35 minutes, and that of the corner-stone on the surface is 92 degrees 5 minutes, while the general direction of the east wall with south wall, as determined by the Survey, is 92 degrees 50 minutes. The eastern wall is somewhat irregular, the first 120 feet only being in a straight line; beyond this are several bulges, but it is probable that below the surface the first 260 feet of wall are in a straight line. At this point there is a small postern on about the same level as the Single Gate on south side From this postern the wall takes a slight bend to north-east, so that at 650 feet from south-east angle it is about 8 feet to east of a line in production of first 260 feet

South-east Angle—Masonry Above Ground

At the south-east angle there are fourteen courses of drafted stones above the surface, giving a height of about 54 feet Above this is later work for about 23 feet 6 inches, giving a total height above ground of 77 feet 6 inches The upper masonry is much out of repair

Counting from the surface, there are six courses, averaging in height

3 feet 8 inches, then the *great course*, 6 feet in height, and then again seven courses of about an average of 3 feet 8 inches in height. The bed of the great course is on a level with the floor of the vaults known as Solomon's Stables, which will be described while speaking of the south wall. The courses are set back, each behind that below, from $\frac{1}{2}$ to $\frac{3}{4}$ inch The stones from the *malaki* are much worn, while those of the *missæ* beds are in an excellent state of preservation.

On some of the stones are projecting shoulders or tenons, which may have been used in bringing the stones from the quarries and in setting them Similar projections are to be found in the wall of the Haram at Hebron, and also in the masonry of the citadel. At about 74 feet from the angle northward the east wall sets back about 3 inches This is done by notching out the stones It is supposed by some to mark the northern limit of a tower, but there is nothing to show there was any tower here

The stones run on beyond this point as one wall At 105 feet 6 inches from the corner there is a cut joint in the wall, the drafted stones with smooth faces terminate, and those with rough projecting faces commence (described page 125) A similar break is found immediately below, near the rock, and therefore it is probable that it is continuous throughout. Although there is thus a distinct break in the wall at this point, it does not follow that the old east wall from the south-east angle proceeds no further north, it may recede a few feet and then be continued within the rough-faced wall. Between the set back at 74 feet, and the break at 105 feet 6 inches, at a level of 2,372, are two stones which form the springing of an arch, extending for 18 feet. These stones appear to be *in situ*, and they would appear to have formed a portion of an arch to the east, but this is not probable Immediately above this springing there is a passage in the wall, filled up, which appears to be of later date than the drafted stones. The course below the springing projects 18 inches, as it appears to do under Robinson's arch. A search for traces of the pier was made below ground without result. (See preceding page)

South-east Angle—Masonry Below the Surface

The masonry below the surface was examined by several shafts and galleries. There are twenty-one courses of drafted stones below the surface (from *M* to *g*), making a height of 80 feet 5 inches, or 79 feet 3 inches to the rock in which the bottom course is bedded. The five lower courses, having never been exposed to view, are in a most excellent state of preservation, as perfect as if they had been recently cut. They are well dressed, and with the exception of the size of the drafts, differ in no wise from the more perfect stones at the Wailing Place. The marginal drafts and a space about 2 inches round the projecting surface, have been picked over with an eight-toothed adze, about eight teeth to the inch, within this a 'point,' or single pointed chisel, has been used. With the exception of two courses, *W* and *X*, all twenty-one were seen at one point or another, and they appear similar in every respect to those at the Wailing Place. The heights of the courses differ at different points.

On the south wall the stones set back about 1 inch in each course, on the east wall they set back from 3 to 4 inches, and in one case 6 inches. It will be necessary to examine each course separately.

Course g.—The lowest or foundation course, *g*, is 3 feet 8 inches high, it is partially sunk in the rock at the angle, but to the north it was found to be let entirely into the rock, until at 41 feet it ceased, the rock here rising abruptly, and the second course being let into it. There are drafts on the upper portions of this course. The course rests on the hard *mezzeh*, the rock cut away for the stones being soft and decayed.

Course f.—The second course, *f*, is 4 feet $3\frac{1}{2}$ inches in height, and extends to the north the same distance as the lower course, where the rock rises abruptly. On the south side it extends to the west 8 feet $3\frac{1}{2}$ inches, and is bedded in the rock, and completely covered at its western end. The corner stone has a 1 inch draft at the top, ordinary drafts at the bottom and sides, it is very roughly dressed within the draft. The second, third, and fourth following stones to the north are very peculiar in appearance: the second stone has an $8\frac{1}{2}$ inch draft at top, while the lower draft is only $1\frac{5}{8}$ inches, it has ordinary drafts at the sides; within

the drafts the surface is well dressed, and there are incised letters. The third stone has no upper draft, while the lower draft is 16¾ inches wide The side drafts are of ordinary width, the surface within the drafts is well dressed, and there are red paint marks thereon The fourth stone has an upper draft of 12½ inches, but no lower draft, the side drafts are as usual, and the surface within the drafts is well dressed The remaining stones of this course (5, 6, 7) have drafts of from 2 to 3½ inches in width.

Course c.—The *third course* is 4 feet 2½ inches high, and extends about 64 feet to north; but has not been examined for more than 41 feet. It is set back 4½ inches on the east side, and 1½ inches on the south side It extends about 14 feet along the south side to west, where it is let into the abruptly rising rock. The corner stone has no draft at top, and a 4½ inch draft at bottom. The second stone is cut in a very careful manner. The drafts in this course are of the ordinary type, those on the upper side, except near the corner, were not seen.

Course d.—The *fourth course* is 3 feet 7½ inches high, it extends about 76 feet to north, where it is let into the rock, to the west it extends 18 feet, where it is let into the rock. It is set back 2½ inches on east side, and 1½ inches on south side. The corner stone has a shallow 9 inch draft on top, and is 17 feet 4 inches long on east side. The nine following stones have drafts which vary from 3½ to 8 inches at top, the side drafts are of ordinary width, and the bottom drafts were not seen. The last stone let into the rock was not seen.

Course e—The *fifth course* is 3 feet 8 inches in height, it extends about 80 feet to the north, where it is let into the rock, and 19 feet 5 inches to west, where it is let into the rock. It is set back 4½ inches on the east side, and 1 inch on the south side The corner stone is 14 feet 4⅛ inches long on the south side, by 6 feet 6 inches on the east side, it is similar in every respect to the best specimens of stones found at the south-east angle above the surface.

The drafts vary considerably, they are generally about 2½ to 5½ inches on the lower side, and from 3 to 6 inches on the upper side; the upper drafts were not seen beyond 45 feet from the angle. The third and eighth stones are very roughly dressed within the drafts. From the fact of the red paint marks being found on so many of these stones,

and from two of these being roughly faced, it is apparent that this portion of the wall was not exposed to view. The thirteenth stone at 54 feet from the corner has no draft, it is only 18 inches wide The face of the eleventh stone, on which there are some incised characters, projects about ½ inch too much, and has been worked a second time over about half its surface At 71 feet the set-off on *Course d* changes from 2 to 4½ inches The course reaches the rock at 76 feet to the north.

Course b.—The *sixth course* is 3 feet 6 inches in height, it extends to west on south side for 20 feet (in one long stone), and its western end is let into the rock, which covers its upper edge for 18 inches The eastern side was not seen

Course a.—The *seventh course* is 4 feet in height It was not seen at the south-east angle, but two stones were uncovered in the shaft sunk to the west of the Ophel wall. They rest on the rock, and have no draft

Course Z.—The *eighth course* is 4 feet 6 inches high One stone was uncovered in the shaft to west of the Ophel wall. It has a 6-inch draft at top and bottom, and the face projects 9 inches. This course sets back 1½ inches.

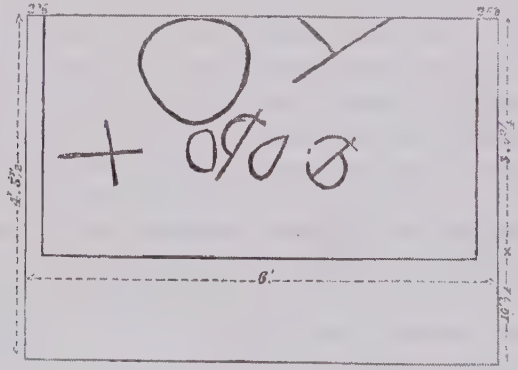
Course Y.—The *ninth course* is 4 feet high Two stones were partially seen in the shaft west of the Ophel wall It has ordinary drafts, and the faces of the stones are well dressed The upper portion of this course is also seen in the gallery that runs along the tenth course (*X*) At 64 feet 3 inches north of the south east angle, this course is reduced 6 inches in height to allow of the tenth course setting into it. At 108 feet from the south-east angle this course terminates, and courses at a different level, with rough projecting faces, continue the wall.

Course X.—The *tenth course*, 3 feet 8 inches high, runs north for 108 feet from the south-east angle, where there is a straight joint for at least three courses, *W*, *X*, and *Y*, and there is the probability that this break or straight joint continues to the surface, there being a similar break in the wall immediately above. During the east wind a strong gush of air came through this break in *Course Y* into the gallery, but not so in the west wind, this is probably owing to the east wind pressing against the break in east wall above, and is strong evidence that this break continues throughout

The tenth course was seen from 32 feet north from the south-east angle, to 108 feet. The stones have the ordinary marginal drafts. The first stone met with has a face dressed with the pick. At 64 feet 3 inches from the south-east angle the height of the course increases from 3 feet 8 inches to 4 feet 2 inches, by being let down into the *Course V* below 6 inches. This continues up to 108 feet from the south-east angle, where the straight joint in the wall occurs. At 70 feet from the corner there is a stone with a face which is not well dressed, and the next stone to it has a projecting face. At 89 feet 9 inches there is a break of some kind, but it may only be caused by unskilful workmanship. The set-off to the south of this point is $6\frac{1}{4}$ inches, but beyond it the whole *Course X* sets back $9\frac{1}{2}$ inches on *V*, and *IV* projects 2 inches over *X*. Beyond the break at 108 feet, the bed course with rough projecting faces is 1 foot 10 inches above the bed of *X* for 25 feet 8 inches; beyond this point the course rises again 4 inches, and continues 25 feet 7 inches, when the next stone falls 10 inches. The northern course of this stone touches the rock at 161 feet 10 inches from the south-east angle.

The Characters on the Stones.

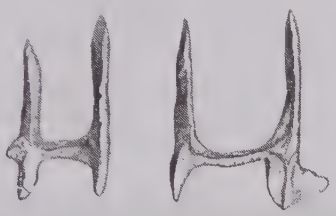
The characters found on Courses *c*, *d*, *e*, and *f*, at the south-east angle, are either painted or cut on the stones. The incised characters are cut



STONE C OF SECOND COURSE OF EASTERN WALL.

with a tool to a depth of $\frac{3}{8}$ inch. The painted characters, in some instances 12 inches high, appear to have been put on with a brush. The paint used

is red, probably vermilion, and easily rubbed off with a wet finger. There are a few red splashes here and there, as if the paint had dropped from the brush. The general impression from an inspection of the characters is



INCISED CHARACTERS.

that they are the quarry marks, and were painted on before the stones were laid in their places. The principal characters are given full size in Plates XXI. to XXIII.

On some of the stones there are no characters visible; on others, the whole of the surface within the draft is occupied by characters.

In the second course, the second stone has two incised characters, the third stone is covered with painting. (See Plates XVIII., XIX., XXII. and XXIII.

In the third course (*c*), the first stone has one character, the third, fourth, and fifth have a few faint red paint marks on them, and the sixth stone has an incised mark.

In the fourth course no marks were seen.

In the fifth course, nearly every stone has a red paint mark. On the first there are two on the south side, in seven instances there are single paint marks at the left-hand top corner.

These *graphiti* were examined by the late Mr. Emanuel Deutsch, and the conclusions he came to were as follows:—

1. The signs cut or painted were on the stones when they were first laid in their present position.

2. They do not represent any inscription.

3. They are Phœnician. I consider them to be partly letters, partly numerals, and partly special masons' or quarry signs. Some of them were recognisable at once as well-known Phœnician characters; others hitherto unknown in Phœnician epigraphy I had the rare satisfaction of being able to identify on undoubted Phœnician structures in Syria.

General Notes.—South-East Angle.

A shaft was sunk (commenced 14th November, 1868) at a distance of about 20 feet south-east of the south-east angle. Stone chippings were met with, alternating with layers of fat earth, and in some instances rough stones a foot cube. At 53 feet a gallery was driven in to Sanctuary wall on level of bed of *Course c* (2,293 feet), passing through two rough masonry walls, one running north and south,

GALLERY AT SOUTH-EAST CORNER OF SANCTUARY.

the other east and west. In the gallery exposing *Course c* a gallery was driven to the east for about 8 feet from the south-east angle, and it was ascertained that the rock slopes away at an angle of 1 in 9. Subsequently it was driven for 30 feet, and found to be at an angle of 31°. The upper surface of the rock, for a depth of 2 to 3 feet, is very soft and decayed; beneath this is the hard *mezzeh*, on which the base course of the wall is built.

At 3 feet to the east of the angle a hole was found scooped out of the rock, 1 foot diameter and 1 foot deep. On clearing the earth out, a little earthenware jar was found, standing upright.

At 4 feet north of the angle, close to the wall, the rock is cut away in the form of a horseshoe or semicircle, 2 feet wide and 2 feet 8 inches deep. Dark mould was found in this.

Upon the soft rock there rests an accumulation of from 8 to 10 feet of fat mould abounding in potsherds. This mould does not lie close up

against the Sanctuary wall, but is 12 inches away from it at top, and gradually closes in to it. Between it and the wall is a wedge of stone-chippings.

The fat mould slopes to the east at an angle of 1 in 4. It is quite evident that when this wall was built, this 10 feet of mould and pottery, and the soft rock also, was cut through, for the purpose of laying the foundation-stones on solid rock. The pottery found in the mould is broken up into fragments, and no shapes can be recognised. A long rusty nail was, however, found.

The chippings between the wall and the fat mould are in many cases rounded, and unlike what would result from stone-dressing, having more the appearance of backing used in the walls at the present day in Palestine. It is apparent that the stones were finished at the quarries, and not when in the wall.

Above the mould is a layer of stone-chippings, which slope at an angle

of 1 in 3 to the east. At one point, near the corner, they slope towards the Sanctuary instead of away from it, but this is merely local. At this point the chippings are mixed up with some black stuff like decomposed or charred wood

The rock rises 18 feet in 76 feet to north from the south-east angle, and again 17 feet in another 85 feet, giving a total of 35 feet in 161 feet To the west it rises very rapidly, 18 feet in 20 feet, then there is a level space; and it rises steeply to the *Great Passage* under the Single Gate. To the east of the corner it is nearly level for 8 or 10 feet, it then falls rapidly, at about 30°, to the Kedron valley.

The pottery and relics found about the south-east angle consisted of

1 A small jar found in a hole cut in the rock, standing upright as though it had been purposely placed there. Dr. Birch considers this jar may possibly be of the fourth or fifth century B.C, and to be of Egyptian ware in shape

2. Fragments of pottery and fat-lamps, these are considered by Mr. Franks 'to be of late date,' not earlier than the second century B C, but it was noticed during the excavations that these fat-lamps were always found in the red earth in all quarters of the city, and it is probable that they were the earliest type of lamp used in Jerusalem

3 A long rusty iron nail, some charred wood, and a layer of broken pottery resting on the red earth. Among the pottery were found several jar-handles, some of which had well-defined figures impressed on them, resembling in some degree a bird, but believed to represent a winged sun or disc, possibly the emblem of the Sun God.

There are Phœnician characters, similar in shape to those of the Moabite stone, on each handle, above and below the wings, and in two instances they have been read by Dr. Birch as follows .—

LeMeLeK ZePHa
To or of King Zepha

LeK SHaT
King Shat

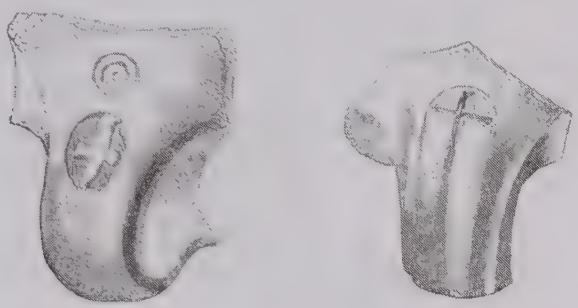
M. Ganneau, however, renders these inscriptions as—

MoLoCH ZaPH.
LoCH SHaT,

and believes them to be names of men, partly composed of the name of the God Moloch, like Hannibal.

Another handle found in the same place bears as a potter's mark 'a cross within a semicircular mark.'

While such different views can exist as to the meaning of these



characters it is idle to speculate as to their age, or as to the light they may shed upon the age of the south-east angle.

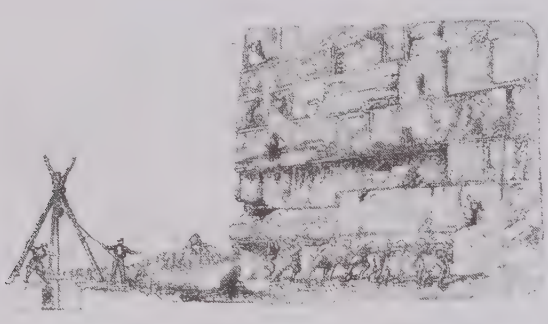
Galleries in Western Side of Kedron Valley below the South-East Angle.

Three separate attempts were made in 1867 to find the rock at an intermediate point between the south-east angle and Kedron valley. A gallery, a staircase gallery, and a perpendicular shaft were tried in turn, but each failed after working a few feet into the rubbish, which lies at an angle of 30°, consisting of stone-chippings, without a particle of earth, being in character almost a fluid.

It was apparent that if the rubbish on the eastern side of the Sanctuary existed to any great extent, it would cover the true Kedron valley for some distance: and it was found on excavation that the true bed of the Kedron is 240 feet to the west of, and 38 feet below, the present bed, and that water flows through it during the rainy season.

A shaft was sunk 305 feet due east of the south-east angle. At a depth of 20 feet the rock was found falling to the west; and at 65 feet, or at 240 feet from the Sanctuary wall, the true bed of the Kedron was found at level 2,171 feet.

A masonry wall 3 feet thick was found on the west side of the true bed. For the first 60 feet from the Kedron bed there is a gentle ascent, west; and here some roughly rounded flints (pot-boilers ?) and whorls were found on the rock. The rock now rises rapidly, west, and loose shingle was encountered, which, when it got in motion, carried all before



it to the bottom of the gallery. At 160 feet from the entrance the air became very impure, but on going a little further a rushing noise was heard, which proved to be a stream of pure air circulating through some rift in the soil. Masonry walls were now encountered, apparently for supporting terraces along the Kedron valley.

The rock now rose so rapidly (at 30°) that further advance was impossible, and the work was abandoned at 130 feet from the Sanctuary wall. (See Plate X.).

The Ophel Wall at the South-East Angle of Sanctuary.

The wall of Ophel, abutting on the south wall of the Sanctuary at the south-east angle, was probably about 12 feet 6 inches wide at the top, and is about 15 feet wide at the bottom. Its faces are perpendicular. At the south-east angle it is found at 4 feet from the surface (level 2,352 feet), and it is here 18 inches in advance of the Sanctuary wall. At the level of 2,324 it is flush with the Sanctuary wall, and at its foot it is probably about 2 feet 6 inches behind it, but this has not been ascertained.

It was examined to a depth of 30 feet on the western side, close to the south-east angle. The top course is drafted, and is 3 feet 8 inches in

height, and serves as a coping For the next 26 feet the stones are squared and well dressed, in courses averaging 1 foot 9 inches in height, they are in some instances of *malaki*, and in others of *mezzeh*. Below 30 feet, at a level of 2,322 feet, there is a set-off of 8 inches, and the wall is built of rubble from its foundations

It is probable that when this wall was built the old Sanctuary wall had been in existence many years, and the *débris* had filled up the valley at this point to a height of 44 feet. This is apparent from the rough rubble-work up to a height of 44 feet from the rock, and from the fact that the foundations of the wall are not on the rock, but on the hard layer of clay or fat earth resting on the rock about level with Course *Z*

South Wall of the Sanctuary.—General Aspect.

The south wall is 922 feet in length on the level of the Noble Sanctuary, and is broken into three nearly equal sections by the Double and Triple Gates The former is 330 feet from the south-west angle, the older portion of the latter is 300 feet from the south-east angle.

The present surface of the ground runs nearly at a level (2,380 feet) from the south-west angle to the sill of the Triple Gate, it then shelves down 22 feet to the south-east angle. The natural features of the rock on which the south wall is built present a very different appearance, being covered up at the south-east angle and in the valley at 90 feet from the south-west angle, with accumulation of rubbish to a depth of about 80 feet, and cropping up to the surface at the Triple Gate. The highest point of the rock at the Triple Gate, about 2 feet below the sill, is 2,378 feet, from whence it falls eastward about 100 feet in 300 feet, to the south-east angle, where the level is 2,280 feet It continues with a fall of 109 feet in 240 feet to the true bed of the Kedron valley (2,171 feet), which is thus 209 feet below the sill of the Triple Gate. The rubbish has accumulated in the Kedron valley to a depth of 100 feet, covering over the true bed

Towards the west of the Triple Gate, to a point 90 feet from the south-west angle, in a distance of about 500 feet, the rock falls about 90 feet to the bed of the Tyropœon valley (2,290 feet), and from this point to the

south-west angle there is a rise of about 35 feet in 90 feet. At the Double Gate the rock is probably about 36 feet below the sill. The south wall was examined at nine separate points, and there is no doubt that it is one continuous wall, and that the courses of stone are drafted from the rock, and are *in situ;* but portions were built at different epochs, the portion at the south-west angle as far as the Double Gate appearing less ancient than the remainder. It is built up to Course *N*, a height of 55 feet from the valley bed, with drafted stones with rough projecting faces, and at this level there is the indication of a pavement stretching from the south-west angle to the Double Gate, the sill of which is 36 feet above the rock.

These roughly faced stones run out under the Double Gate In the remainder of the wall the faces of the stones are well worked from the foundation course. It has been suggested by Colonel Wilson that there may be a break in the wall at the Single Gate at about 108 feet from the south-east angle.

As the rock is found at the sill of the Triple Gate, it follows that there is no course running through from end to end below that level The first course has its bed on a level with the sill of the Triple Gate; it is nearly double the height of the other courses in the Sanctuary wall, being from 5 feet 10 inches to 6 feet in height.

The portion of the Sanctuary wall between the south-east angle and the Double Gate at present lies wholly outside the city wall. It has one distinguishing feature, viz, the *Great Course*, of drafted stones, which extends with some *lacunæ* from the south-east angle to the Double Gate. There are no drafted stones to be found above the Great Course except at the south-east angle. Here there are seven courses, which break down rapidly to the west. The ancient masonry at the angle after the destruction of Herod's Temple thus rose like a turret before the more modern ashlar was built up

This is probably the so-called 'Pinnacle of the Temple' spoken of by the Bordeaux Pilgrim and others.

The remainder of the wall above the Great Course is composed of masonry of various ages

The Great Course (See Plans XX and XXIV)

The average height of drafted stones in the Sanctuary wall is from 3 feet 6 inches to 3 feet 9 inches, the Great Course measures from 5 feet 10 inches to 6 feet in height It is unbroken between the Double and Triple Gates, from thence to the Single Gate there is one stone *in situ*, and it is found again for 70 feet at the south-east angle, it extends 24 feet from the south-east angle on east side Its bed is on a level with the sill of the Triple Gate and the floor of Solomon's Stables, and is about 1 foot above the highest part of the rock where cut by the south front at the Triple Gate, consequently it is the first course on this front that can run uninterruptedly from east to west It extends for 600 feet from the south-east angle, but is not to be found to the west of the Double Gate At the south-east angle the corner stone of this course weighs over one hundred tons, and though not the longest, is the heaviest stone visible in the Sanctuary wall

The bed of this course falls about 2 feet from the Triple Gate to the south-east angle, this may have been purposely arranged on account of the peculiar nature of the ground, to avoid offending the eye, the rock having a fall in this distance of 90 feet from west to east

Were the wall of one construction, the course should be found running through to south-west angle, but no signs of it could be found west of the Double Gate At the two shafts near the Double Gate, the stones at the level of this course are so worn that it is uncertain whether they were drafted, and they consequently throw no light on the subject, but at the south-west angle and in the two shafts to east of it, the drafted stones are found at a higher level than the Great Course, and yet there are no signs of the Great Course itself At the south-west angle itself there is a stone (Course *D*) 38 feet 9 inches long, whose bed is about 4 feet above the bed of the *Great Course*, but its height is little more than half, from 3 feet 3 inches to 3 feet 6 inches, and it is not of so fine a description of masonry (Plate XXVIII)

On the west side of the Triple Gate the stone of the Great Course has a moulding.

Masonry above the Surface below the Great Course.

Below the *Great Course* all the stones are drafted similar to those at the Wailing Place Six of these courses are to be seen at the south-east angle Those of the softer *malaki* beds are very much worn, while those of hard *mezzeh* are beautifully preserved.

There are thus at the south-east angle fourteen courses of drafted stone visible, which, from the upward slope of the ground and the breaking down of the stones from above, gradually lessen in number until at the Single Gate, 105 feet from the south-east angle, only the Great Course is visible.

The Single Gate (Plates XX. and XXIV.).

This is a closed entrance with pointed arch of modern construction, leading to Solomon's Stables Its sill is about 3 feet 9 inches below the level of the floor of the vaults It is situated about 105 feet to west of south east angle.

Beneath the surface, from the south-east angle, which has been described (page 153), the masonry of the wall was examined for 3 courses, in search of any opening under the large aisle of Solomon's Stables.

The Great Passage.

This was discovered October 18, 1867, at a distance of 108 feet from the south-east angle, and immediately beneath the Single Gate The top of this passage is on level (2,360) with the bed of course *K*, and is about 19 feet below the floor of Solomon Stables, or 60 feet below the level of the Sanctuary It is 69 feet long, 3 feet wide, and is at right angles to the south wall

It was nearly full of rubbish ; but its height is probably from 6 feet at the northern end to 14 feet at the entrance. It lies under one of the aisles of Solomon's Stables. At the entrance the floor appears to be about 5 feet above the rock, and at the northern end the rock, which rises in that direction, is probably the floor.

There are two entrances, one over on the other, with a course of stone (*M*) between, they are 2 feet wide The upper opening is the height of the course *L*; the lower opening is cut out of courses *N* and *O*, and is about 6 feet high. At 7 feet within the entrance there are indications of there having been a metal gate. A *check* 10 inches square, and of the same depth, is cut in one of the roof stones, and there is the mark of abrasion on one of the side stones, as though a metal gate has swung against it

On both sides the stones are of large size one of them is 15 feet long; they are nearly all drafted, and are beautifully worked, but some of them are only hammer dressed The roof is made of larger marginal drafted stones, laid horizontally on the side walls At a distance of 69 feet the roof stones disappear, and the passage probably leads into a chamber, it is here closed with broken stones and rubbish, and appear to have been filled up before the piers of the stables were built. On the east side there is a passage, blocked up This was cleared out for 9 feet, but had to be abandoned for fear of interfering with the substructure of the vaults above. A shaft leading upwards was here found The upper course is 3 feet in height, and at the bottom, on each side, are the remains of a small aqueduct, jutting out from the wall, made of dark cement.

There is a channel sunk in the floor, about 12 inches wide and deep.

It has been suggested that the east side of this passage may possibly have been the west side of an outlying tower, but it is to be remarked that the west side of this passage is quite as substantial and well built as the east side There is also no reason for supposing that any straight joint occurs in the Sanctuary wall at this passage.

It is useless at present to speculate on the subject in a permanent record; all that we know for certain is that the passage was for the exit of some liquid—whether for water, sewage, or for the flow from the altar cannot be determined

In order to reach this passage, the existence of which was surmised, a shaft was commenced 37 feet south of the gate, and at 22 feet a slab was found drafted on its under face; it is supposed to have covered a passage from the *Great Passage* This shaft had to be abandoned on account of the looseness of the soil

A shaft was then sunk at 14 feet from the Single Gate, rock was found at 34 feet 6 inches, the surface rugged

For the first 20 feet there were loose stones and rubbish, then for 10 feet the soil was very firm, of a dark-brown colour. Fragments of dressed stones of *malaki* and *mezzeh*, pieces of marble, and rough stones were found

The shaft was filled up for 11 feet, and a gallery driven northwards, when the Great Passage was discovered

There was great danger to the workmen in getting to this passage, on account of the loose character of the earth and rubbish, consequently measurement could not easily be taken at the entrance, though the wall could be seen. There was no appearance either above or below of any straight join in the east wall, but there was the appearance of the wall being continuous

This shaft was kept open for some weeks in case the Committee of the Palestine Exploration Fund should require any further information on the subject.

Solomon's Stables.

These vaults are in part ancient and in part a reconstruction, probably about the time of Justinian. The floor is somewhat above the bed of the Great Course, so that, except at the south-east angle, the whole of the outside wall enclosing these vaults is of later date than the epoch of drafted stones.

The name of Solomon's Stables is of mediæval origin; the Moslems call them El Masjid el Kadim (The Old Mosque). They were used as stables by the Crusaders, and the holes in the piers by which the horses were fastened may still be seen.

Exclusive of the double tunnel of the Triple Gate there are 13 rows of vaults of a variety of spans, from 11 feet to 25 feet east and west, north and south the spans average 11 feet 6 inches

The vaults splay out from south to north, on account of the south-east angle being more than a right angle.

In the south-east angle are the remains of some rough rubble work attached to the ancient wall, and these appear to be the remains of a massive semicircular arch

The piers of the vaults are made out of old material, from stones

that probably at one time formed part of the south wall; nearly all these piers have drafted margins on one side, in some cases on four sides, and in others on two. These vaults extend from the south-east angle to the Triple Gate, on the south side and for about 170 feet to north on the east side.

It is surmised that Solomon's Palace occupied this site; but this is a matter of speculation.

The Triple Gate and Double Tunnel (Plate XXV)

This gate is generally ascribed to the time of Justinian, and opens into the Stables of Solomon; it formerly was the entrance to a double tunnel similar to that at the Double Gate. (See Plate V.)

The gateways of the Triple Gateway are each 13 feet wide, with piers 6 feet wide. The outer arches are semicircular, but inside they are elliptical, and have a greater span, so that the doors might fold back flush with the piers.

At the base of the gateway are remains of the ancient entrance.

The *Great Course* forms a portion of the western jamb, and has a sort of architrave moulding. On the face of this stone some modern Hebrew characters can be traced.

The west wall of the tunnel is formed of piers 4 feet thick and 10 feet 6 inches apart, with semicircular arches thrown over, on which rests the vault covering the passage. Between the piers rough walls of ashlar are built, forming recesses 18 inches deep. This portion appears to be of the same date as the Triple Gate and vaults of Solomon's Stables.

At about 192 feet from the south Sanctuary wall, the piers and arches terminate, and the wall is built up of ashlar very irregular in size, here and there a stone of considerable size being worked in, and on one of these false joints are cut.

The ramp rises at about 1 in 12, which is the rise of the ramp at the Double Gate. It is cut into the rock in parts to a depth of 3 feet. At the sill of the gate it is 38 feet below the level of the Sanctuary.

At 192 feet from the south wall the original Double Tunnel terminates, and it is continued with a modern arch and wall.

There is nothing whatever in this wall that can give it the slightest pretension to be considered as the east wall of the Temple Enclosure of Herod, and the remains of engaged columns *in situ* assist in proving that it was an entrance to the Sanctuary, with a ramp like that at the Double Gate

There are remains of engaged columns in the gateway similar to some which have been found deep down in the excavations at the south-east angle, among the *débris*. On either side in the piers of the western arch of the Triple Gate are engaged columns similar to that in the wall. The lowest course only remains, and they have no base mouldings

There is a lintel, which may have formed part of the old gateway, forming part of one of the piers in Solomon's Stables

The width of the Double Tunnel at the Triple Gate is 39 feet, while that at the Double Gate is 41 feet, probably the passages may have been 17 feet wide The piers added in recent times have reduced these passages to about 14 feet each

These two double tunnels in the south wall, at the Double and Triple Gates, thus correspond to each other in their length, width, and slope of ramp, and though they may not have been built at the same time, they probably both led up to the Sanctuary level. That at the Triple Gate, on the east, is probably the most ancient The sill of each is on the same level.

Passages Under the Triple Gate (Plate V.)

These passages are evidently overflow canals and inspection passages connected with the various tanks of the Sanctuary, and were arranged so that the water might be drawn off at different levels It is obvious that they could not have been used for carrying off the blood, etc, from the altar, as the tanks in connection with them are on a considerably lower level They may have been used for flushing the blood channel, which may possibly be the *Great Passage* below the Single Gate.

The passages were blocked up to the north by walls of hard old masonry On removing these, they were found to communicate with Tanks X and XI, and probably with the *Great Sea* They were cleared

out for 60 feet to the north in the tunnel, but the work was stopped by the Pacha.

There are two of these sets of passages—the *upper* and the *lower*

The upper passage lies to the east, and is entirely rock-hewn until it leaves the Triple Gate It is a continuation of the rock-hewn overflow passage from Tank XI, and is also connected with Tank X It passes under the centre arch of the Triple Gate, and then turns sharply round to the east until opposite the east pier of the gate, when it turns again to the south-west in a zigzag course. This passage may have been for inspecting the tanks, it does not appear to have been a water-channel. To the south of the Sanctuary wall this passage is roofed with flat stones It passes the foundations of some old building, the stones of which are dressed without marginal drafts. The sides of the passage rest on the rock The floor is about 9 feet below the surface at the Triple Gate.

The western passage is double, the branches joining a few feet south of the Triple Gate The western branch, coming from Tank X, is 3 feet 6 inches wide, and has a drain or water channel sunk in its floor, with a step on each side, as in the old aqueduct from Solomon's Pools found near the Cœnaculum. It is 19 feet below the surface of the ground The eastern branch comes from just under the floor-line of the tunnel, at the entrance to Tank X., and descends very rapidly to a depth of 19 feet, when it meets with the western branch Here there is an old doorway, which indicates that it was a passage, and not a water-channel. These passages have not been explored to the south.

The Double Gate.

This Gate has a twin passage, or tunnel, leading from the level 2,380 feet by a ramp up to the Sanctuary above; it probably is one of the Huldah Gates mentioned in the Talmud, and is similar to the double passage at the Triple Gate. The double entrance is partially covered by the Khatuniyeh, but about 6 feet of its eastern side is exposed (*vide* photograph) The pier separating the passages can be partially seen in Khatuniyeh vaults The pier is 6 feet wide, and the passages 18 feet, and correspond to the other three openings in the Sanctuary wall, at the Triple Gate, Barclay's Gate, and that near Bab al Mathara The openings are

covered by a lintel, with relieving arch and cornice. Both the pier and the lintel have marginal drafts, but the general appearance of the entrance leads to the conclusion that it is a reconstruction out of old material of comparatively recent date.

In the Sanctuary wall at this point is the Antonine inscription, upside down *

The sill of the gate is on a level with that of the Triple Gate, and is estimated to be 36 feet above the rock

This double tunnel at the present extends for 260 feet under the Aksa before it opens on to the Sanctuary, but from the drains and ducts found on the surface, *under* and alongside the present Aksa, and from the fact of the masonry of the tunnel changing at 190 feet, it is evident that this tunnel originally opened into the Sanctuary at 190 feet from the south wall. The same was found with the double tunnel leading from the Triple Gate.

In building the Aksa Mosque it was necessary to extend the passage to 260 feet, and to cut down a portion of the ramp to a more gentle slope to prevent its coming to the surface too soon The western portion of the passage was also filled up on the north, to give room for a heavy pier of masonry supporting the Mosque. There is a break in the arch of the eastern passage just where the western terminates, and the ramp at that point also changes its inclination

The change in the inclination of the ramp necessitated the cutting away of the duct to the Well of the Leaf.

The additions to this vault and to that of the Triple Gate appear to be described by Procopius in his account of the erection of the Mary Church of Justinian, on the foundations of which the present Aksa Mosque is supposed to be built

Entrance to the Tomb of Aaron's Sons, at South End of Double Passage below the Aksa.

Within this gate the stones were removed, and the passage through the wall examined It is 10 feet 6 inches thick, and rough inside, and is

* See paper on inscriptions

backed up with earth. There was no appearance of any series of vaults or buildings to the west of this passage

Standing Place of Elias, east side of Double Gate.

The end of the passage or doorway was broken through, it is 18 inches thick Behind is a mass of loose rubbish, after the removal of a quantity of which it was apparent that there was only made earth beyond.

It is thus clear that the double tunnel is by itself in the made earth, and is not a portion of any series of vaults similar to those at the south-east angle It is possible, however, that at the south-west angle there may be vaults in continuation of Cistern XX.

Masonry from the Double Gate to the South-West Angle above Ground

About the Double Gate itself drafted stones are to be seen, but beyond it, to a point about 67 feet from the south-west angle, only large stones with plain-dressed faces are to be found These stones are of about the same height as the drafted stones, and the top of the highest course is on the same level as the top of the highest drafted stone at the south-west angle—2,400 feet

Some of the stones are upwards of 4 feet in height, they are not laid very skilfully, and the lines of the horizontal joints have a wavy appearance, and in one case a course 4 feet high at one end gradually runs out in 200 feet to a height of 3 feet 4 inches This, however, is not a feature confined to this hewn or squared work, as it frequently occurs in the drafted stones, and may be seen at the south-west angle The corner-stone, 38 feet 9 inches long, is 3 feet 3 inches high at the northern end, and 3 feet 6 inches at the south-west angle

The jointing also of the squared stones is not well arranged, the joints acting as weepers, and the wall being much disfigured by the deposit of lime on it.

The upper portion of the wall, above the squared and drafted stones, is constructed with mediæval masonry of small stones with rough projecting faces

Masonry at the Double Gate below the Surface (Plate XXVII)

Shaft *C* 21 was sunk 213 feet from the south-west angle, close to the platform of the Double Gate Commenced 17th June, 1869

The level of ground was about 2,378. Fifteen courses of stone were exposed, from *G* to *U*, the latter being bedded in the rock at level 2,322 feet 4 inches The distance from surface to rock was 54 feet 10 inches

The courses vary in height from 3 feet 4½ inches to 4 feet. The eight lower courses (*N* to *U*) have marginal drafts, with rough projecting faces

The first two courses (*G* and *H*) below the surface are so much worn that it is not certain that they have marginal drafts; *I* and *J* are also much worn, but the drafts can be seen On *K* no drafts can be seen—it is very much worn, *L* and *M* are worn, but the drafts are quite conspicuous

Below this the stones have rough faces, but the drafts are in excellent preservation, having never been exposed to the weather since the wall was built

At 3 feet 6 inches an old wall was encountered butting on to the Sanctuary wall, the mortar of which appeared to have been mixed with oil to harden it It was passed at 6 feet, and then the soil was found to be composed of lime and small stones

At a depth of 25 feet, about on a level with the stones with rough projecting faces, some large stones were met with, which continued to 36 feet From this to the rock the soil was composed of small stones and chippings mixed with earth The rock at the bottom appeared to fall to the west.

Masonry at 90 feet East of South-West Angle.

Shaft *C* 19 was sunk 90 feet east of south-west angle. It was commenced in October, 1867

The level of the ground was 2,377 feet Twenty-four courses were exposed, varying from 3 feet 6 inches to 3 feet 9 inches in height, from *G* to *d*, 87 feet 6 inches.

The foundation-stone (*d*) is bedded in the rock at the bottom of the

Tyropœon Valley; it has a marginal draft, and a smooth face finely dressed.

The stones of the fourteen next courses, from *P* to *c*, have finely worked marginal drafts from 4 to 6 inches wide, and rough faces—in many cases as much as 18 inches beyond the drafts—as though they had not been touched after leaving the quarries

The next course (*O*) has a face projecting 3 inches beyond the draft, and the next course (*N*) has a roughly dressed face

The four next courses (*J* to *L*) are similar to those at the Wailing Place, but much worn, and the remainder above are plain-dressed, without marginal drafts

The rough-faced stones are in an excellent state of preservation, having never been exposed to the weather since the wall was built The joints are hardly discernible, and so close that the blade of a knife can scarcely be thrust in between them Each course is set back about 1 inch, to give the wall a batter

At 12 feet 6 inches from the surface is a pavement of *mezzeh*, well polished (probably from wear), the stones about 12 inches by 15 inches Beneath this, the shaft passed through 16 feet of concrete of stones, bricks, and mortar In this, at a depth of 22 feet, the signet-stone of 'Haggai, the son of Shebaniah,' was found, the name engraved in Hebrew of the transition period, supposed to be at least as old as the time of the Maccabees

For 5 feet, to a depth of 33 feet 6 inches, loose stones and shingle were met with Here the rough projecting stones commence Below this level a wall was found perpendicular to the Sanctuary wall, and reaching down to the rock, built of rubble, the stones about 2 feet cube The shaft was continued to the east of this wall, and large stones were met with, measuring 3 feet by 2 feet 6 inches by 2 feet

At 79 feet the covering-stone of a passage running south was reached, the bottom 6 feet lower down, and the rock at 87 feet 6 inches (level 2 289 feet 8 inches) The passage is 4 feet high, 2 feet wide, built of rubble masonry, with flat covering-stones It is similar to that at the Triple Gate, but not so carefully constructed

The passage was cleared out for 600 feet, and appears to follow the bed of the Tyropœon valley, the rock being found to rise on either side

At 350 feet from the Sanctuary wall a narrow branch gallery runs in from the east.

This passage appears to have existed previous to the building of the Sanctuary wall, and to have been cut in two by it. It appears to have no communication now with any drain from the north

Masonry at 64 feet 6 inches East of the South-West Angle

This shaft (*C* 20) was commenced 10th June, 1869, immediately under the Sanctuary wall, at the Bench Mark near the point where the drafted stones break off abruptly. Surface of ground, 2,380 feet 4 inches

Nine courses (from *F* to *N*) were exposed, varying in height from 3 feet 4 inches to 3 feet 11 inches. The three first courses are much worn, those from *J* to *N* well preserved The rough-faced projecting stones commenced at *N*

Small stones and dry earth were found to a depth of 11 feet, at a depth of 15 feet 6 inches was a rough pavement set in lime, of stones from 12 to 14 inches square, and about 9 to 12 inches deep

Below the pavement the soil was good On finding at a depth of 29 feet 6 inches that the stones with rough projecting faces commenced with Course *N*, the shaft was closed.

Masonry in Shaft at South-west Angle, South Side

Shaft *C* 22 commenced 30th June, 1869 Level of soil, 2,384 feet Thirteen courses from 3 feet 4 inches to 4 feet in height were exposed from Course *D* to *P*. The stones with rough projecting faces commenced at *P* and the shaft was not sunk deeper A gallery at Course *P* was driven round the south-west angle to the west side, and two stones in that corner examined in order to ascertain whether the stones with rough faces continued to west At the end of this gallery to west a shaft was sunk, and it was ascertained that the next course (*Q*) had also a rough projecting face

The stones below the first pavement from *K* to *P* are well preserved In course *J* is a round hole 5 inches in diameter and 10 inches deep

Loose stones and chippings were found to about 16 feet in depth, then large rough stones 3 feet by 18 inches

At 23 feet 10 inches a pavement was met with near the top of Course *K* below the hole in Course *J* At 28 feet the shaft came on some early Christian lamps, one with a Greek inscription

The soil, which below the pavement had been good, now changed to rough stones, and the shaft was continued with difficulty to a depth of 38 feet 4 inches, when a pavement of very large stones was met with, in an excellent state of preservation; it is 18 inches in depth Below the pavement the drafted stones with rough projecting faces were found at a depth of 42 feet 4 inches, the rubbish here being composed of large rough stones.

The South Wall from Double Gate to South-West Angle.

From these excavations it is clear that this section of the wall is composed of stones with rough projecting faces up to the level 2,350 feet, except at the south-west angle, when they only reach up to 2,343 5 feet The two courses between these two levels have not such projecting faces as those below From here up to level 2,366 5 feet, there are four courses, similar to those at the Wailing Place, except for about 60 feet at the south-west angle, where there are ten more courses rising to 2,402 feet, so that more than 36 feet of the old masonry has evidently been overturned between the Double Gate and south-west angle, and been replaced by stones with plain dressed faces of nearly similar size to the drafted stones.

The Pavements

It would appear that the upper pavement extends from Wilson's Arch round to the Double Gate; it is about 23 feet below the present surface, and is nearly on a level with the sill of Barclay's Gate and with the pavement discovered in the shaft under Wilson's Arch It has been found to extend round the south-west angle to east for at least 90 feet, and it is possible that it may be the roadway leading under Wilson's Arch to the Dung Gate, spoken of in the Citez de Jherusalem

A similar road under Wilson's Arch to the Dung Gate is to be seen

depicted on the plan of Jerusalem of the twelfth century. Smith's 'Biblical Dictionary,' art Jerusalem Underneath this pavement was the pottery ascribed to the fourth and fifth century, and if so, we must suppose this pavement to have been made after that date

The lower pavement is apparently a portion of that found running up from Robinson's Arch, past Barclay's Gate, which existed at the time of the fall of Jerusalem, after the siege by Titus; it is possible it may be the marble pavement laid down by Herod Agrippa It appears that it may have been carried under the ramp at Barclay's Gate, through an arch which there is reason to suppose still exists there, similar to, but smaller than, Robinson's Arch

The filling-in of the ground about the wall up to the level of the top of the courses of stone with rough projecting faces appears to be exactly in accordance with the account of Josephus (Bib v v 1) 'The lowest part of this was erected to the height of 300 cubits, and in some places more, yet did not the entire depth of the foundation appear, for they brought earth and filled up the valleys, as being desirous to make them on a level with the narrow streets of the city.' Whether the valley had partially begun to fill up, or whether the whole of the soil was brought, is now the only question that needs clearing up, it being generally admitted that the roughly faced stones were never exposed to view

The Tyropœon Bridge at South-West Angle of Sanctuary.

The masonry at the south-west angle of the Sanctuary is now allowed by all classes of controversialists to be of the Herodian period It extends as far as Barclay's Gate on the east side and as far as the Double Gate on the south side, beyond these points there is a change

The peculiarity of this portion of the Sanctuary wall is that it is built with drafted stones with *rough projecting faces* up to a certain height (Course *P*), whereas at the south-east angle, and from Barclay's Gate to the Wailing Place, the drafted stones have their faces nicely worked throughout the wall from the foundation.

The remains of a pavement have been found, running round the wall at the height of the termination of the drafted stones with rough faces, and the inference to be drawn is that this portion of the wall is of

a construction later than the portions above mentioned; that is to say, that the portions about the Wailing Place and south-east angle were built before the time of King Herod, and that the south-west angle was the extension by King Herod

The Sanctuary wall is now covered up by an accumulation of soil at the south-west angle to about the level 2,388 feet, and above this level several courses of drafted masonry are visible At the present level of the ground is to be seen the longest stone that has yet been found in the wall It measures 38 feet 9 inches from the south-west angle to the commencement of Robinson's Arch, it is 3 feet 4 inches high, and 10 feet thick, and weighs about 80 tons, it is about 62 feet above the foundation of the wall

Above this stone there are on the south side four courses, and on the west side two courses of drafted stones yet remaining in the wall This masonry, as may be seen from the photograph, is similar, but not superior, to that at the Wailing Place. The south-west angle is a right angle

Above these drafted stones are ten courses of small squared plain dressed stones, without marginal drafts, averaging 1 foot 10 inches in height, similar to those in the south wall, east of Double Gate, and to those in the west wall at Barclay's Gate. They are generally considered to be late Byzantine (Plate XXVIII)

At about 75 feet from the south-west angle, on the south side, the four upper courses of drafted stones cease and their place is occupied by large squared plain stones, without marginal drafts, of about 3 feet 6 inches in height, similar to those at the Wailing Place. Above these again are the small squared stones with smooth faces At about the level of the Sanctuary the wall is built of small drafted stones with rough projecting faces, similar to those in a portion of the Citadel (Plate XXVII)

In the west wall, about 50 feet from the south-west angle over Robinson's Arch, there is an abrupt change in the style of masonry. The wall is built of small stones cut out of old material, beyond the arch the small stones without drafts again appear in the lower portion of the wall There is thus evidence of five distinct periods of construction, which probably succeeded each other in the following order

1. The large stones with marginal drafts. Epoch from Solomon to Herod Agrippa

2. The large plain dressed stones, from Hadrian to Justinian.

3 The medium plain dressed stones, sixth to eighth centuries

4 The small stones with marginal drafts and projecting faces, ninth to twelfth centuries.

5 Small stones of various description, recent (Plate XXVIII.)

At 39 feet from the south-west angle on the west side are the remains of the springing of an ancient arch, first discovered by Dr Robinson, and so called Robinson's Arch The three first stones, forming the springing and being portion of the wall, are all that now remain of the arch above the surface of the ground They are of soft *malaki*, are much worn, but yet the curve of the intrados is quite apparent This line of springing extends for 50 feet at a level of 2387 5 feet Below this the course has an off-set of 1 foot 3 inches, and it has been suggested that this is a pier extending to the foundation. It is probable, however, that the next course again sets in in line with the Sanctuary wall, as is the case with a similar set-out under the arch-stone at the south-east angle

It seems to be a matter for speculation as to why the arch-stones of a bridge should be of soft *malaki*, when the adjoining stones in the wall are of hard *missa* These arch-stones are about 4 feet in height, and do not appear to be a portion of the original wall. From the arch up to Barclay's Gateway the Sanctuary wall above the surface of the ground is made up of small stones squared and drafted, and none of the ancient masonry is to be seen.

West Sanctuary Wall below Ground

The wall was seen at the south-west angle (described in speaking of the south wall) to a depth of 48 feet to Course *P*, where a gallery was driven round the angle to a distance of 10 feet along the west wall, where these stones were found to have rough projecting faces. The wall was seen in several places *above* the pavement in a drain reaching as far as Barclay's Gate, running along the wall at a level Here it was found to be similar to the wall at the Wailing Place. (Plates XII. and XXVIII.)

Again the wall was seen at several points *below* the pavement, and the stones were found to have rough projecting faces. It was seen in a

gallery immediately below the pavement under the arch, and at the foundation at three points, at one 55 feet north of the arch, and in a passage a little south of the arch, where the same rough faces were seen It is thus certain that below the level of the pavement (at Course *P*) the stones have rough projecting faces, while those above the pavement are similar to those at the Wailing Place There are six courses below the pavement and twelve courses above to the surface of the ground. They average 3 feet 4 inches to 4 feet in height, and give a general height from the ground to the rock of about 62 feet The excavations below the surface proved that the Sanctuary wall extended in an unbroken line from the south-west angle to Barclay's Gate

The wall is here built over the western side of the valley (Plate VII) No excavations were permitted from the surface close to the Sanctuary wall on the west side, but early one morning three courses were uncovered near the southern side of the arch

Robinson's Arch and the Pier

The arch as it is now seen in the west wall extends for 50 feet, and the span is a little over 41 feet 6 inches at the pavement, probably at the surface under the springing the span may have been 43 or 44 feet, allowing a batter both for the wall and pier

The pier is 51 feet 6 inches in length, so that there thus appears to have been a batter on the ends of the pier of 9 inches, as the width of the arch is 50 feet The pier rests on the rock at 42 feet below the spring of the arch at level 2,345 feet, and is 20 feet above the base of the Sanctuary wall, and is above the pavement It is 12 feet 2 inches thick, and constructed of long drafted stones of hard *mezzeh*, similar to those in the wall above the pavement, one being over 13 feet in length and weighing ten tons

Only about half the bulk of the pier is occupied by stone, there being a hollow space 5 feet wide in the interior, and the eastern side being built up in a series of five smaller piers, each 5 feet long, with spaces 6 feet 6 inches wide, covered with lintels This extends upwards for two courses, or about 7 feet 3 inches, and the stones of the third course lie like

Three courses were *in situ* on the eastern and two on the western side. The lowest course is 3 feet 6 inches in height, the second 3 feet 9 inches, and the third 4 feet in height. They correspond in appearance to Courses *L*, *M*, *N* at the south-west angle.

The eastern side of the pier has no batter for the two courses, while on the western side the second course is set back several inches. The pier was examined at its northern and southern ends, on the eastern side

for 28 feet, and along the western side—but here, on account of the nature of the ground, it could not be carefully examined.

To the west of the pier is a rock-hewn channel close to the pier, with a perpendicular scarp below the pier of 4 feet; and on the east side of the pier the rock is scarped down nearly perpendicularly for a depth of about 18 feet.

The Pavement (Plates XXVIII. and XXIX.)

Stretching from the base of the pier to the Sanctuary wall, at a level of about 2,345 feet, there is a pavement of blocks of hard *missa* weighing about ½ ton each. They are highly polished (probably by traffic), and have a fall slightly to the east.

This pavement was also seen at the southern end of the pier, where a manhole was found leading down to an aqueduct below. As will be mentioned hereafter, the shafts up to the surface from this aqueduct were traced from the south-east angle for a distance of 220 feet, or nearly to Barclay's Gate. This pavement is probably a portion of that found at the south-west angle at level 2,350. The pavement appears to have a rise in its length of about 8 feet to Barclay's Gate.

The Voussoirs of the Arch (Plates XXVIII. and XXIX.).

On the pavement reaching from the base of the pier to the Sanctuary wall are the voussoirs of the arch lying in lines north and south, just as they fell, and there was space sufficient between each set to enable a man to squeeze, with difficulty, for about 10 to 15 feet to north or south from the central point, where they reached close to the pier.

They are of the *malaki* bed, but are so hard that it was necessary to blast out a passage through them to the east. This was very dangerous work, as the stones lie loosely one over another, and the gallery frames were not strong enough to support their weight.

These voussoirs were again examined both at their northern and southern terminations, from the extremities of the piers across nearly to the Sanctuary wall; but there was other masonry here intermingled, and the voussoirs forming the faces of the bridge could not be identified.

Aqueduct above the Pavement (Plates VII., XXIX. and XXXII.)

The northern portion of the pier was found to have been utilized as the side of a cistern, its bottom above the pavement. After it was emptied, a low passage or drain was found in its eastern side leading to the

Sanctuary wall at about 8 feet above the pavement. On reaching the Sanctuary, it branched off north and south along the wall. It is 3 feet wide and 2 feet high, and is covered with flagging on the top, its sides are of rubble and flagging

On the side to the Sanctuary wall the rubble is thick, and every here and there, through a break in the side, the ancient wall can be seen with its drafted stones, similar to those at the Wailing Place

It was traced as far north as the southern side of Barclay's Gate, where a break in the top occurred, through which a great amount of shingle poured, and prevented the continuation of the search It was, however, found again in the shaft along the northern joint of Barclay's Gate

The total length to the north was 165 feet (?). It here appears to end in a vault or cistern, probably the arch supporting the viaduct to Barclay's Gate. It was examined about 35 feet to the south, when the roof stones were found to be wanting.

Rock below the Pavement (Plates XXVIII. and XXIX)

The rock appears originally to have sloped from the foot of the pier to the Sanctuary wall at a slope of about 1 in 2, or 20 feet in 40 feet It is, however, scarped nearly perpendicularly down for 20 feet from the pier, and is then cut nearly horizontally and smoothly from the foot of the scarp to the Sanctuary wall It continues to fall to the valley bed, which was found at about 90 feet east of the south-west angle.

The space under the pavement, between the Sanctuary wall and the rock, is filled with *débris* and old masonry.

The Old Aqueduct, and Voussoirs of a Fallen Arch (Plates XXVIII. to XXX).

Cut in the levelled rock (level 2,325) is an aqueduct, which, under the middle of the bridge, is 12 feet deep and 4 feet wide; and its eastern side is 12 feet from the Sanctuary wall at this point. The bottom is at a level 2,313 feet.

It does not run parallel to the wall, and was probably cut a long time before the wall was built It is covered by an arch, but opposite the

centre of the pier this arch has been broken in for about 20 feet in length by two large stones, apparently the voussoirs of a bridge, which have fallen from above. One of them is much decayed, the other is 7 feet long, 5 feet thick at the extrados, 4 feet 4 inches at the intrados, and 4 feet high. Towards the centre, at one side, is a square joggle hole 14 inches by 11 inches, by 4½ inches deep

Search was made both in the aqueduct and in the *débris* for other voussoirs without result, though they may exist

This aqueduct has a fall to the south

At 24 feet south of the two voussoirs is a square rock cut cistern, spanned by a segmental arch from north to south, whence a passage runs east to the Sanctuary wall, which is cut in two by it. A second passage to the west from this cistern is closed by a fallen stone, on which the arch of the tank rests

To the south there is an entrance to a circular rock-hewn cistern, diameter 16 feet, height 14 feet 4 inches, the roof of rock and flat, with a thickness of 2 to 3 feet The roof is pierced with a shaft leading down from the pavement above

This rock-cut aqueduct continues from the cistern to the south with its bottom nearly at the same level as that of the aqueduct to the north, while the bottom of the cistern is 3 feet lower, so that there might be a supply of water in the tank to be drawn off by buckets let down from the pavement above through the shaft

The aqueduct continues to the south-east, 8 feet deep, 3 feet 9 inches wide, and covered by a nearly semicircular but slightly pointed arch of six stones. After passing round the south-west angle, the aqueduct changes its direction more easterly, and, emerging from the rock, is carried on in masonry 3 feet wide, with an arch of 5 voussoirs It falls rapidly towards the bed of the valley After about 40 feet it turns to south, and is continued as a drain 2 feet wide, roofed over with flat stones, for a further distance of 59 feet, when it becomes silted up and very narrow.

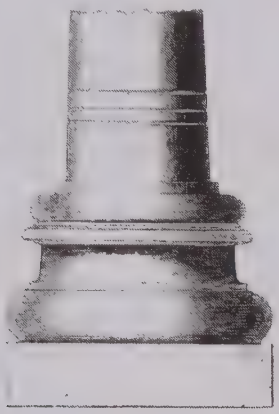
To the north of the fallen voussoirs the aqueduct runs slightly away from the Sanctuary wall, and is 3 feet 9 inches wide and about 11 feet high It is arched by a peculiar skew-pointed arch, with five courses, two on one side, measuring 22 inches, and three on the other side, measuring 33 inches At 34 feet from the north end of the pier the canal issues from a circular

rock-hewn cistern, 12 feet 9 inches in diameter, 14 feet high, with its floor 3 feet below that of the aqueduct. The roof is of rock, and is pierced with a shaft from the pavement above. There are also two shafts down from the pavement to the aqueduct, between the two rock-hewn cisterns, but only one is shown on the plan. A canal 4 feet wide, cut in the rock, and 14 feet in length, enters the cistern at the north. At the north end of this canal, to the east, is the entrance to a circular rock-cut cistern, of which only half can be seen, as it is cut in two by

the foundation of the Sanctuary wall. To the west of this canal, and partially over-lying the rock-cut cistern, are two rock-hewn rectangular chambers, 16 feet by 6 feet, with semicircular arches. In one is a flight of steps leading up above, cut in the rock. A base of a column had fallen through the roof, and was lying in one of these chambers.

The canal from this cistern turns to the west for a few feet, and then sharply to the north: it leaves the rock, and is continued in masonry for 123 feet, 3 feet wide and 8 feet high, with a semicircular arch of

five voussoirs. In front of Barclay's Gate, and at about 14 feet from the Sanctuary wall, it is replaced by a narrow passage 18 inches wide with a flat roof of flagging. It now runs off from the Sanctuary wall, and at a distance of 160 feet, near the Street of the Chain, it is cut in two by



the wall of a house. Opposite to Barclay's Gate the bottom of the canal was about 7 feet above the rock. At every 30 or 40 feet in the canal, shafts in the roof were found leading up to the pavement, by which buckets could be lowered for the purpose of obtaining water. The aqueduct, from its commencement to the south-west angle, has a

fall of about 1 in 20. The aqueducts were filled with mud and silt nearly up to the top of the arches.

Several lamps, stone weights, jars, and an iron bar were found in the canal; also a stone-roller similar to those still in use in some parts of the

country for rolling the flat roofs of houses, covered with wooden joists and mud. There are no such roofs now in Jerusalem, they are all of masonry, wood being very scarce.

The Valley under the Sanctuary.

The bed of the valley is about 90 feet east of the south-west angle, the rock sloping down to it at about 2 in 5. The wall crosses the valley to the eastern side, between Wilson's Arch and Barclay's Gate.

The following is a suggestion as to the sequence of the various works about this portion of the wall

1. The winding aqueduct was cut in the rock at a very early period, and may be the 'brook that ran through the midst of the land,' (2 Chron. xxxii., 4) with its cisterns suitable for the supply of the inhabitants with water. It probably proceeds from the Hammâm esh Shefa, higher up the valley, a rock-cut well which now supplies the baths of Jerusalem with water.

2 The west retaining wall of the Temple of Solomon was built, (represented by the present Sanctuary wall) from Barclay's Gate to Wilson's Arch. The Palace of Solomon was built (represented by the old masonry) at the south-east angle of the Sanctuary A bridge was constructed leading across from the Lower City to the Palace.

3. The arch of this bridge fell in, or was removed, the aqueduct was arched over; the present south-west angle was constructed from Barclay's Gate to the Double Gate by King Herod.

At this time the rubbish in the valley was raised to a height of 23 feet, accordingly the wall was built with rough projecting faces to this point, and the rubbish covered over with the present pavement, and the pier and arch of the Tyropœon Bridge were constructed. In order to obtain water readily, shafts (which still exist) were constructed at intervals from the pavement to the canal and pools

At Barclay's Gate the ramp would be 16 feet above the pavement, with a retaining wall on east side. That on the north still exists. It is probable that this ramp passed over an arch which still exists. (*Vide* B J. v. 5, 1, and Ant. xx 9, 7)

4. The bridge fell at the time when the city was taken by Titus,

and now rests upon the pavement, the valley became choked up with *débris*

5. A pavement and the drain found underneath was laid at the level of Barclay's Gate, from the south-west angle to the Bab as Silsile, and Wilson's Arch was built over it

Mention of this road and arch is made in the Citez de Jherusalem, and parts of the pavement and drain still exist

Excavations in the Tyropœon (Plate XXVI).

Seven shafts were sunk in a line east and west across the Tyropœon Valley, opposite to Robinson's Arch, in order to ascertain the nature of the valley and search for remains of the ancient viaduct

No. I.—285 feet from the Sanctuary wall, and close in under the eastern side of the Upper City; the level of surface was 2,401 feet; the level of rock, 2,379 feet 6 inches. It was sunk through common garden soil, and at 21 feet 6 inches came on a polished limestone slab, 6 feet square, covering the main sewer of the city, which is 6 feet high, 3 feet wide, cut in the rock, and full of sewage, through which a current of water was running to south—probably from the baths, some pieces of paper were thrown in, and in a few minutes they appeared in the main sewer, where it is uncovered, outside the Dung Gate. This seems to be the sewer through which the fellahin entered the city in the time of Ibrahim Pasha, when they appear to have penetrated up as far as the causeway of David Street, and found exit through some of the vaults there. The sewer itself runs on past the Dung Gate towards Siloam, until it opens out on the side of the hill above the Kedron, only a few feet south of the Fountain of the Virgin. It was examined by our party in 1868, and is, no doubt, the passage explored by Dr Barclay ('City of the Great King'), as far as the Dung Gate, when he supposed it to be a water channel running into the Virgin's Fount, from the Temple or from Sion

The sewage at present escapes from the sewer after passing the Dung Gate, and is used by the fellahin for the purpose of irrigating and manuring

No II.—250 feet from the Sanctuary wall (line of surface, 2,406 6 feet,

level of rock, 2,388 6 feet) came upon the remains of a colonnade just below the surface, consisting of piers built on the rock, 2 feet by 3 feet, and 3 feet by 4 feet, and about 12 feet 6 inches apart, with fallen arches between, the piers were built of well-dressed ashlar of soft sandstone, similar to the ruins of Kakûn, Suwaimeh, etc, in the Jordan valley On the north side a plastered wall of rubble was found between the piers, and it was not ascertained whether there were more piers beyond, to the east they were continued (as will be seen in the succeeding shafts), and appear to have formed either a covered way or else to have supported the viaduct reaching over to Robinson's Arch The flooring was much disturbed, and is formed of well-dressed limestone flagging cut in squares, and laid parallel to the lie of the building, east and west The piers measure about 12 feet from flagging to springing of arches, and are built in courses about 1 foot each in height.

Cut in one of the piers is a little door, leading to a cylindrical cistern cut and roofed in rock, and plastered with 2 inches of cement, the diameter of the cistern was 10 feet, the height, 15 feet 3 inches, the roof is slightly domed

No. III —216 feet from the Sanctuary wall (level of surface, 2,409 5 feet, level of rock, 2,377 5 feet) at 12 feet an arch similar to, and in line with the north wall at No II was found, at 18 feet a limestone pavement similar to No II Below the pavement was found *débris* of cut stones, 2 feet by 1 foot by 1 foot, and the remains of a wall (*malaki*) running north and south, of well squared dressed stones, resting on the rock

No IV.—182 feet from the Sanctuary wall (level of surface, 2,405 5 feet, level of rock, 2,383 5 feet) at 12 feet was found the *débris* of a stone building, and part of a white marble column, 12 inches in diameter These ruins appear to be a portion of the colonnade met with in Nos II and III Below this at 22 feet, the mouth of a cistern was cut in the rock The cistern was square, the sides 10 feet long, the roof flat, and 7 feet below the surface of rock the height 10 feet, with plaster 2 inches thick and very hard, there is no entrance for water, two man-holes exist, opening down through the roof, 1 foot 4 inches by 2 feet 3 inches, and 2 feet 6 inches by 2 feet respectively. This may have been constructed for the reception of grain in early times

No. V.—132 feet from the Sanctuary wall (level of surface, 2,399 feet, level of rock, 2,369 feet) came at 13 feet 6 inches on the walls of a plastered chamber, resting at 21 feet 3 inches on a strong wall of hammer-dressed stones, running north and south, which again, at 26 feet 10 inches, rests on a strong wall, running east and west, there are three courses of this latter remaining, and they rest on the rock, the courses are 1 foot 8 inches in height.

The rock here is scarped and cut into steps; there is a recess at the bottom of the steps covered over by a piece of flagging 3 inches thick, on which a buttress rests, the stones of these walls are of *malaki*, the wall running east and west is about 15 feet thick, and its use is not apparent

No. VI.—92 feet from the Sanctuary wall (level of surface, 2,395 feet, level of rock, 2,354 feet 6 inches) passed some *débris* of sandstone similar to that found in Nos 2, 3, and 4, probably forming part of the colonnade.

At 9 feet was found the mouth of a shaft 8 feet deep, opening through the crown of a nearly semicircular arch, covering a tank 18 feet long, north to south, 11 feet 6 inches wide, and 15 feet high from the bottom to the springing of the arch A hole was made through the plaster at the western side, and rock found at $3\frac{1}{2}$ feet, it is scarped for some feet north and south; it probably is the east side of the second pier from the Sanctuary wall, no drafted stones, however, were found on it, neither were any fallen voussoirs found underneath the tank, which is quite a modern construction

From this cistern a staircase gallery was driven along the face of the rock to the pier of Robinson's Arch, the last 16 feet being in a curious cutting in the rock

The Tyropœon Valley.

It appears by the excavations recorded above that there is a steep scarp from the Upper City down to the Tyropœon, and that thence the rock shelves down to and past the south-west angle of the Sanctuary wall, the levels being —

Brow of cliff under Jews' Quarter, about 2,446 feet;
Ground at foot of scarp, about 2,415 feet,
Level of rock at Robinson's Arch, 2,325 feet,

Level of rock in bed of valley, 2,289 feet,
Spring of Robinson's Arch, 2,387·5 feet;
Level of Sanctuary, 2,420·0 feet,
Present level of ground at Robinson's Arch, 2386·5 feet.

In this slope there are two minor depressions, which are probably artificial, they serve to show how hazardous it is to risk speculation as to the slope of the rock from its appearance over a small area, thus at two points for several feet it slopes to west instead of to east

Sir Charles Wilson has suggested that the sandstone piers found on this line may be portion of a bazaar or other building erected during the period of the Frank kingdom

There are no grounds for supposing that the roadway over Robinson's Arch led up to the Upper City, either by steps or by a bridge; it was probably one of the suburban entrances spoken of by Josephus. There may have been other arches in continuation of Robinson's Arch, but there is no indication of this existing on the ground

The First Suburban Gate and Wailing Place.

(Plates XXXI and XXXII)

This gate is called by old writers 'the Gate of Mahomet,' or 'the Prophet's Gate,' it is also called 'Barclay's Gate,' after Dr. Barclay, who first discovered it, and above it is the modern gate of 'Bab al Maghâribe,' or Moor's Gate

The Moor's Gate is situated about 270 feet from the south-west angle, from this point to the Mahkama, a distance of about 200 feet, the old wall of the Sanctuary is exposed for six courses above the pavement of the Wailing Place; level 2,392·5 feet

The stones in these courses are very unequal in appearance, some of them are from the best *missæ* beds, and are admirably finished and well preserved, while others are from the soft *malaki* and upper *missæ*, containing numbers of small nodules, and disintegrating rapidly (See Woodbury-type)

Many of these softer blocks are much worn by the weather, and are not set on their quarry beds In consequence of these inequalities in the

wall, it has been suggested by Sir Charles Wilson as 'almost certain that the stones are not really *in situ*, and that this section of the wall is a reconstruction out of old material' But as these inequalities are also found among the stones down to the rock, both at the Moor's Gate and at Wilson's Arch, the suggestion merely amounts to the proposition that when this wall was built some stones were used in it that had been used in a former wall. But even in this case it is only a proposition that this wall was not constructed by the *first* builder at Jerusalem who used drafted stones

It would appear also that it would be the *first* builder at Jerusalem who would make the mistake of using soft and hard stone indiscriminately, before experience had taught that stones of certain kinds wore out before others of a more durable nature.

In fact, the very faults found in this wall rather tend to prove its antiquity. In later years experience taught the builders how to select and place the large blocks so that they might survive through all ages.

The drafted stones in the Wailing Place are of an average height of 3 feet 6 inches and have drafts of from 2 to 4 inches in width, and $\frac{1}{4}$ to $\frac{1}{2}$ inch in depth, worked over with an eight-toothed chisel, the face being also worked over in a similar manner

The stones of the Wailing Place are so well known that they are taken as a standard of comparison for other portions of the wall of the Noble Sanctuary

Above these drafted stones are four courses of large squared stones with plain dressed faces which are usually referred to the late Roman or Byzantine period. There are several holes notched into the wall, which seem to indicate that formerly it was covered over with vaulted buildings, as at the Mahkama and the House of Abu Saud

The general level of the Sanctuary is 2,420 feet, but at the Moor's Gate it is but 2,416 feet Immediately outside this gate the general surface of the ground is about 2,395 feet, and a ramp leads up to the gate on vaults This ramp, near the gate, is formed of two vaults one over the other, and in the lower one the lintel of Barclay's Gate is seen

The bottom of the lintel is at a level of 2,398 feet 5 inches, being 5 feet 5 inches above the surface of the ground at that point

The height of the lintel is 6 feet 10 inches, the total length visible is 20 feet 1 inch

The calculated length of the lintel is 24 feet 8 inches The lintel projects over the northern jamb, and this jamb is flush with the northern side of the older portion of the passage inside, which is here 18 feet 8 inches wide, supposing the gateway to be also 18 feet 8 inches wide, and the lintel to project also as much over the southern jamb, its length is thus obtained The entrance under the lintel is 28 feet 9¼ inches in height, and calculated to be 18 feet in width Above the lintel the Sanctuary wall is built with small stones plain dressed, and the entrance itself is filled up with coarse rubble, with here and there a few cut stones

Built into the rubble masonry, 11 feet below the lintel at its northern end, is a projecting stone corbel, which has probably been used for supporting the substructures or vaults of a house built against the Sanctuary wall.

The two courses of drafted stones and four courses of squared stones above the level of the lintel, which are to be seen at the Wailing Place, terminate abruptly at about 12 feet from the gate, on the north.

Sanctuary Wall below the Surface at Barclay's Gate

The wall below the surface and the northern jamb of gateway were examined by a shaft sunk down to the rock.

The sill-stone of the gateway is so broken that it is difficult to determine whether the entrance was 28 feet 9¼ inches, or 32 feet 1¼ inches below the lintel, the former has been assumed as the height

The Sanctuary wall was bared to a depth of 78 feet 6 inches from the bottom of the lintel to the rock, and the stones are of one appearance throughout, and are probably *in situ* They appear to be similar to those at the Wailing Place, but are not so much worn. Many of them are well preserved at the top and worn at the bottom

There are twenty-six courses of drafted stones in all, twenty-two below the lintel, two on a level with it, and two above its level They are from 3 feet 3 inches to 3 feet 11 inches in height With one exception the top draft on each stone is a little wider than the bottom draft, and this peculiarity has been noticed in other portions of the wall.

The bottom course is let into the rock, and each course is set back from ½ to 1 inch

A shaft was commenced near the northern jamb of the gate on 17th March, 1869, at level 2,392 At 5 feet below the surface a lamp and a good deal of broken pottery, bearing scrolls and other devices, was met with

The soil was very black and loose; at 14 feet hard earth was met with, mixed with large stones, some of them 2 feet long

At 9 inches below the sill course a piece of stone flagging was encountered, forming the flat roof of the drain running along the Sanctuary wall to the south-west angle This drain is here 2 feet 4 inches wide, and 5 feet 6 inches high.

This drain was followed from the south-west angle to within a few feet of this point, communication by knocking was made between the two portions of the drain, but it could not be opened throughout, as rubbish from above had choked up the passage. This drain is *above* the pavement found at Robinson's Arch and at the south-west angle

Below this drain, at 31 feet below the surface of the ground, is a heavy masonry wall, faced to north with well-dressed stones in courses 9 inches to 18 inches in height, of *malaki*, without drafts, it is perpendicular, and abuts on to the Sanctuary wall, and is a retaining wall, as it has only a rough face to south: it is 6 feet thick It continues down for 35 feet 6 inches, and its foundations are about 7 feet from the rock, they rest on rubbish.

For the last 30 feet the shaft was sunk through hard earth and broken cut stones, many of them 3 feet by 2 feet by 18 inches

The rock is cut horizontally at the base of the wall for the reception of the foundation-stone, its natural fall appears to be to the west at this point, but the general fall must be to the east, as the bottom of the valley is considerably to the east of this portion of the wall

Near the foot of the wall is the aqueduct which runs from the Great Causeway to the south-west angle.

Approach to the Gateway

From the two shafts sunk at Wilson's Arch and at Barclay's Gate, it is obvious that the Sanctuary wall is for this portion built up from the bottom with drafted stones with well-cut faces. But to the south of the retaining wall at Barclay's Gate, at the south-west angle and round the south-west angle to the Double Gate, the stones in the wall have rough projecting faces up to the level of the pavement under Robinson's Arch, that is, up to Course *P*, or to about 23 feet 6 inches above the rock at Barclay's Gate, the sill of the gate being about 50 feet above the rock

From this the inference may be drawn that the wall to the south of Barclay's Gate is of later date than that to the north, and was not commenced till the valley had begun to fill up about 23 feet 6 inches at this part.

In this case the retaining wall may have been one side of a ramp or viaduct leading across the valley to this Suburban Gate, at a height of 27 feet above the surface of the ground at that time

Ancient Passage at Barclay's Gate.

By those who have considered the position of the Temple in the Court of the Sanctuary, great stress has been laid upon the importance of the passage under the lintel into the Mosque al Burak.

Colonel Wilson says. 'This mosque marks the line of the passage which gave access to the Temple platform, and part of the original covering arch can be seen' And in speaking of the continuation of this passage where it turns to the south, he says 'The west wall of the cistern is parallel to the Haram wall, and in prolongation of the west wall of the passage, so that it evidently formed part of the approach to the Temple platform'

All we know on the subject at present is that here are the remains of an ancient passage leading from the Prophet's Gate, but whether it is Byzantine, Herodian, or of more ancient date, cannot be at present determined, and until correct plans on a large scale of the tunnel and its arches are obtained, it is useless to speculate with too great certainty

The passage running in to the Sanctuary from Barclay's Gate is 18 feet wide, and reaches up to and above the lintel, but its floor is about 22 feet above the level of the sill of the gate; it is called the Mosque al Burak, and is reached by a modern flight of steps leading down from the west cloisters of the Sanctuary At 38 feet from the Sanctuary outer wall this chamber is closed by a masonry wall

The inner face of the lintel is nearly concealed by a flat arch of 5 stones Height, 2 feet 10 inches, the keystone is 3 feet 2 inches in height

From thence, for 10 feet to east, there is a segmental arch of 19 feet 3 inches span, and 3 feet 8 inches rise, of fine workmanship The keystone is 2 feet 6 inches wide, while the other courses of the arch vary from 1 foot 9 inches to 3 feet 6 inches The spring of the arch is on a level with the bottom of the lintel of the gate, and the floor line is 5 feet below this. This arch has a simple moulding on its eastern face The eastern portion of this passage is covered with an elliptical arch of later date In the mosque is shown the ring to which the winged beast al Burak was tied by Mahomet on the occasion of his famous night journey

At 42 feet from the Sanctuary wall this passage is again to be seen in Cistern XIX It reaches to a distance of 69 feet from the Sanctuary wall, where there is a vestibule about 18 feet square, covered by a rather flat dome The passage then turns round to south and continues for 43 feet parallel to the Sanctuary wall

The east and west passage is covered by an elliptical arch of well cut stone, its springing is horizontal, but in that north and south there is a rise to south of about 1 in 10, this latter arch is segmental

To support the dome are segmental relieving arches at a lower level The span is 16 feet 5 inches, there are seven stones in each course The keystone is only about 1 foot 6 inches wide, while the others are about 3 feet 6 inches. These voussoirs are about 3 feet deep They have several mouldings of peculiar shape (shown in wood-cut) The dome is flat, formed of four courses of stone The sides of the passage are thickly coated with cement, and are irregular in parts

There was water in the tank when it was examined. Farther to the south this passage is supposed again to be found in Tank No XX., which is 40 feet wide, 54 feet long, and 44 feet 6 inches deep, with a double vaulted

pointed roof supported by a set of piers running up the centre It appears to be modern in construction, with the exception of the remains of an old arch on the western side

It seems probable that the passage opened out into the Sanctuary at the site of this tank.

The Great Causeway and Pool Al Burak

The buildings of the Mahkama, or Court House, extend along the Sanctuary wall from the Wailing Place to the Gate of the Cham, over a distance of more than 90 feet, and within its vaults the great wall can be traced at intervals, and is found to be in the same line, and built in the same style, as at the Wailing Place

These vaults are reached by an opening from the south through the garden, recently walled off from the Wailing Place They have pointed rag-work arches, and their haunches rest on corbels built into the Sanctuary wall. From the appearance of similar cuttings in the stones of the wall to south, it is probable that the Wailing Place was also at one time covered up by a series of vaults. The level of the Wailing Place is 2,394 feet, but the floors of the vaults are at 2,405 At about 71 feet north from the southern face of the Mahkama is the Pool al Burak, whose level at bottom is 2,388 feet

This Pool is irregular in shape . for about 25 feet it has a segmental arch of good masonry of about 17 feet span, on which the wall of the Mahkama is built On the haunches of this arch are corbels which may possibly have supported the 'Secret Passage' described page 203 Beyond, for about 8 feet, is a trimmer arch of more recent construction and inferior masonry, and the remainder of the Pool is covered by a semicircular arch (Wilson's) with a span of 42 feet, and width of about 43 feet Recently (in 1866) about 16 feet of the northern portion of the Pool has been cut off and turned into a tank, so that the arch now only measures about 27 feet in width The Pool formerly extended still further beyond Wilson's Arch, and this northern part is covered by a pointed arch.

Masonry of the West Wall

Various portions of the Sanctuary wall are to be seen within these vaults and in the Pool al Burak, and beneath the floor of the Pool the wall was examined by a shaft sunk down alongside it to the rock immediately under the southern end of Wilson's Arch, and also by a gallery driven south along Course *J* from the shaft, 27 feet above the rock. A shaft also was sunk in one of the vaults for a depth of 17 feet, at a point 18 feet south of the southern entrance to the Pool. The object of these researches was to examine the wall, in order to ascertain whether there was a second gateway similar to the Suburban Gate (Prophet's Gateway), south of the Pool al Burak. No signs of any such gateway could here be found, but subsequently a gateway was found to the north of the Pool, near Bab el Mathara.

It was clearly demonstrated by these excavations that there was no break in the continuity of the wall from the Wailing Place to the northern end of the Pool.

There are twenty courses of drafted stones south of Wilson's Arch, exclusive of the foundation-stone. They vary in height from 3 feet 3 inches to 4 feet 1 inch, and each course sets back from 1 to 2½ inches. The foundation course at this point is 2 feet 10 inches high, sets out 6 inches, and has no draft. The top drafts vary from 2½ to 5 inches, the bottom from 2½ to 4 inches, and the side drafts from 2½ to 4 inches. The stones exposed are similar to, but in a much better state of preservation than, those at the Wailing Place. The wall, when first built, appears to have been exposed to view from the bottom, and is probably one of the oldest portions of the Sanctuary now in existence. Course *D*, level with the concrete forming the bed of the Pool al Burak, has been cut away to the depth of 18 inches, apparently to receive the skewback of an arch.

Course *J* is very rough, *M* and *N* are nicely worked and preserved, while *O* is much worn. From the manner in which stones well preserved and those much worn, even as far as the foundation, are mingled together, it is evident either that the whole wall is a reconstruction from the bottom, or else that it has been exposed to view from the bottom, the stones much

worn being of *malaki*, and those well preserved being of *mezzeh* The highest course reaches up to level 2,412 feet, while the lowest (*Q*) is bedded in the rock at a level of 2,337 feet The soft rock is cut away to a depth of 2 feet 9 inches, in order to allow of the foundation resting on hard *mezzeh* There is thus a height of 75 feet from the top of the highest course of drafted stones in the Sanctuary wall at this point to the bed of the foundation course The top of the highest course is nearly on a level with the crown of Wilson's Arch, and is 7 feet below the level of the Street of the Chain above

Wilson's Arch

The Mahkama, or Court House (possibly the site of the Council House of Josephus), is a large building measuring about 90 feet from north to south and 80 feet from east to west It rests upon the vaults already alluded to. To the north of the Mahkama, supporting the roadway and a shop wall, is the trimmer arch referred to before (p. 193), about 8 feet across, and immediately to the north of this is Wilson's Arch, 42 feet in span and 43 feet in breadth, stretching from the Great Causeway to the wall of the Sanctuary The road over the arch leads to the two gates of the Sanctuary, Bab as Salâm (Peace), and Bab as Silsile (Chain), at a height of about 80 feet above the rock

This arch covers the greater portion of the Pool al Burak, which was first discovered by Dr Tobler, and is shown by De Vogué in the 'Temple de Jérusalem,' Plate I , but Colonel Wilson appears to have been the first to have drawn particular attention to its importance during the visit to Jerusalem in 1864 The arch is twice mentioned in 'La Citez de Iherusalem,' in Chapter III 'A main senestre sur le pont avoit un mostier de S Gille,' and again in Chapter XVI 'La rue a main senestre si va droit a unde posterne, c'on apele la posterne de la tanerie, e va droit par desos le pont' ('Descriptiones Terræ Sanctæ, by Titus Tobler). From this and from other accounts it is apparent that the street from the Damascus Gate to the Dung Gate passed under Wilson's Arch in the Middle Ages

Wilson's Arch has 23 courses of stones of varying dimensions, as will be seen by reference to the elevation (Plate XXXIII), and the

voussoirs are not of equal thickness, as is the case with the more ancient arches to the west. They are from 7 to 15 feet in length, and have no appearance of any marginal draft on them. There is very little similarity between this arch and that at the south-west angle (Robinson's). The spring of Wilson's Arch is at level of 2,391·5 feet, whereas that of Robinson's is at 2,3[illegible]. The three first stones of the arch appear to form part of the Sanctuary wall, but this is not quite ascertained. It is suggested that this arch as it now stands cannot be earlier than the

fifth or sixth century. Colonel Wilson suggests that it was 'rebuilt in its present form by Constantine or Justinian'; but its reconstruction should more probably be ascribed to a still later date.

The western pier was examined by a shaft sunk at 7 feet from the southern end of the arch. It consists of two walls—that to the east 10 feet thick, and that to the west 5 feet thick—of different kinds of masonry. At the point where the walls were examined there was a space of 6 inches between them, which probably [illegible] towards the north, in which

direction the walls splay outwards about 12 inches The total thickness of the pier at the point examined was 14 feet 6 inches

The east face of the pier (10 feet thick), for 25 feet down from the springing of the arch, is built of large, squared, well-dressed stones without marginal drafts, and similar to those to be found *above* the drafted stones in the Wailing Place There are seven courses of these stones, and they vary from 3 feet 1 inch to 4 feet 2 inches in height In the three lower courses there is a recess 6 feet wide, 9 feet 5 inches high, and 5 feet deep, the lintel being 4 feet 2 inches in height The sides of the recess are well dressed Some grooves cut in the stonework of the recess would indicate that there was here, at one period, a metal gate.

A hole was with great difficulty broken through the pier, disclosing its double nature. On the western side, the 4-feet pier was found to be built of rubble masonry, and to have a recess 2 feet 9 inches deep, 5 feet 6 inches wide, and 5 feet high, the top of which is nearly level with the bottom of the Pool al Burak. This double pier rests upon a solid pier 14 feet 6 inches thick, constructed of rough hammer-dressed boulders of large size. On the east side it extends 19 feet 3 inches, down to the rock on level 2,347 25 feet The interstices were filled up with lime, but it would be impossible to say whether it was once mortar, or caused by more recent infiltration of lime-water.

In consequence of the southern section of the Pool having been made in 1866 into a tank, there was no possibility, without danger, of examining the pier to the north, in order to see whether any portion of it was of ancient date

The general impression gained from the examination of this work is that the older portion of the pier of Wilson's Arch was not built until the epoch when the squared stones without marginal drafts were laid on the Sanctuary wall, when the valley had filled up about 30 feet, to a level of 2,366 5 feet, possibly in the second or third century, but Wilson's Arch itself appears to be even of a later date than the pier, as there is a mass of broken drafted stone, and apparently of fallen voussoirs, reaching from the recess in the pier to level 2,367 feet 5 inches at the Sanctuary wall

General Notes, West Wall.

A shaft was commenced at the south end of Wilson's Arch, alongside the Sanctuary wall, on the 20th November, 1867. The level of the bottom of the Pool is 2,388. The shaft was sunk through 3 feet 6 inches of concrete, formed of stones about 3 inches cube, set in a hard dark cement, nearly as solid as masonry. Below this there is black soil, mixed with stones and chippings, to a depth of 21 feet below the level of the Pool, when a mass of very large stones was encountered, apparently the voussoirs and drafted stones of a fallen wall and arch. These stones continue for a depth of 8 feet, are of hard *mizzeh*, and appear to be similar to the drafted stones in the wall above. A similar mass of stones was met with in the opposite shaft, alongside the pier, but it is not certain that they extend across from pier to wall. Water was found at 44 feet below the springing of the Arch, but after a heavy rain it subsided, and the shaft was continued down to level 2,339·5 feet to the rock, through black soil and large stones.

At a depth of 21 feet below the bottom of the Pool a gallery was driven in to south along the Sanctuary wall, in search of any appearance of a suburban gate. At 23 feet from the south end of Wilson's Arch, and about 27 feet above the rock, the top of a wall was met with, abutting into the Sanctuary wall, of well-dressed stones about 2 feet square. From the top of this wall for a distance of 11 feet, to a wall immediately below the south wall of the Pool el Burak, a pavement was found on a level with the entrance to Barclay's Gate. This pavement may have been in connection with those found at the Prophet's (Barclay's) Gate and at the south-west angle.

It has been suggested that the ground on which the fallen voussoirs and drafted stones were found must have been rough and unlevelled, but there is nothing to indicate this. It is possible that in sinking the shaft a pavement may have been passed through without its having been observed, as a single mining-frame would have covered it up.

A shaft was also sunk on the east side of the pier of Wilson's Arch, about 7 feet from the southern end, and at about 18 feet from the bottom of the Pool the mass of drafted stones was met with, 3 feet higher than on the eastern side of the arch. From here down to the rock was a

mass of rough stones mixed with black earth, very difficult to work through

The Valley

A gallery was then driven across the valley through red mud and large rough stones, and at the eastern end, about 3 feet above the rock, was found the appearance of a rough concrete pavement

The rock under the western pier of Wilson's Arch is 10 feet higher than under the Noble Sanctuary, and the lowest point in the valley is about 16 feet west of the latter

The gallery was constantly flooded with water, to the great inconvenience and danger of the workmen, especially after heavy rains When the works commenced under Wilson's Arch, the water was constantly about 10 to 12 feet above the rock, but during a heavy rain it suddenly fell about 8 or 10 feet, and afterwards rose only at uncertain periods It seems probable that the opening of the aqueducts under Robinson's Arch may have allowed an exit to the pent-up waters The water has the peculiar flavour of the Hammam ash Shafa and of the Virgin's Fount, and the soil, for 8 to 10 feet above the rock, is full of limestone crystals.

The Causeway Vaults

These vaults, discovered in January, 1868, during the progress of the excavation, are of so complicated a nature that their description is a matter of difficulty. They lie to the west of Wilson's Arch, and form the continuation of the causeway, under the Street of the Chain They are totally distinct in appearance from the vaults of the Mahkama, which latter have pointed arches, and appear to have been built at a comparatively recent period A closed window in the second chamber of the northern row of the Mahkama vaults was broken through in January, 1868, and the causeway vaults were discovered

The opening led into a space covered over by a trimmer arch immediately under the Street of the Chain, and the vaults lie to the north of this street and immediately to the west of Wilson's Arch They consist of two parallel rows of vaults, and a long passage or tunnel running along under

the street, which will be called the 'Secret Passage' these parallel vaults lie to the north of the Secret Passage, and are broken up by more recent work, apparently Saracenic, and also are wanting in one portion, where there is a very ancient chamber of drafted stones, a portion of which had been removed to make room for the vaults

The Ancient Hall (Plates XXXIII, XXXV and XXXVI)

As this ancient chamber existed before the vaults and the causeway were constructed, it will be first described It lies about 27 degrees west of north, and 8 feet of its southern end is under the Street of the Chain, its south-eastern corner is about 84 feet from the Sanctuary wall It is at present 30 feet 8 inches from north to south, and 23 feet from east to west, but 10 feet 4 inches has been added on to its southern end, so that it originally was but 20 feet 4 inches from north to south This additional portion has apparently been made for the Secret Passage to pass over It has been used as a cistern, and its walls could only be seen when the plaster was broken away The pavement is at a level of 2,371·5 feet, about 2 feet above the pavement under the Pool al Burak, and at the Prophet's (1st suburban) Gate The walls are 18 feet in height, and of very ancient appearance The crowning arch of the hall is semicircular, with 21 voussoirs, but not as old as the walls; the arch to the south is still more recent, and, to cover the junction, a column was raised in the centre under the break, and two pointed relieving arches thrown over from the column to the sides, the span of each being about 10 feet This column, with part of the relieving arches, has since fallen, exposing the junction of the arches The chamber was filled up with silt to a depth of about 15 feet 6 inches At the southern end of the chamber is a break in the wall leading into one of the vaults of the Mahkama

The walls of the Hall are 4 feet thick, and the stones are on the exterior similar to those of the Wailing Place, with marginal drafts, in the interior the faces of the stones are plain dressed, extremely well-jointed, looking as if laid without mortar, and at each angle there are pilasters, projecting about 2 inches These pilasters have Ionic capitals of peculiar shape, the volute being something similar to that on one of the capitals found at Hyrcanus' Palace, at Arak el Emir

At the original south-east angle of the chamber on the east side is a double entrance, with lintels, on which, as well as upon the jambs, there are traces of ornament.

The gateway was opened out, but a mass of fallen masonry was found in front of it, and the outer walls could not be examined without endangering the buildings above.

In the centre of the chamber a shaft was sunk, 15 feet 6 inches to the pavement, and then through rough masonry to a further depth of 11 feet 6 inches, without finding rock. This masonry was as hard as a solid wall.

The Ancient Hall has all the appearance of being one of the oldest buildings in Jerusalem.

Between the Ancient Hall and the southern portion of Wilson's Arch there is but one vault, 23 feet 6 inches wide, with a span of 22 feet; its springing is at about 2,402 feet, and its floor at 2,398; its crown is a little lower than that of Wilson's Arch; it has 19 courses of stones, all of the same size, and is apparently Roman work. Below this vault there is another of similar description, nearly choked up with rubbish. Below the spring of the lower arch is the recess in the pier, already alluded to when speaking of the pier of Wilson's Arch. In the rubbish below some com-

plicated aqueducts were found, which are cut asunder by the Mahkama buildings, they probably were in connection with the aqueduct running under Robinson's Arch

To the north of the Ancient Hall and of the vault just described is a series of vaults running somewhat to the south of west from the northern portion of the pier of Wilson's Arch These are also vault upon vault, and can be examined below; but the vaults above, with one exception, are covered over with some water-passages of later date These vaults are 21 feet wide, and about 14 feet span, they have semicircular arches, of from 13 to 15 courses each These two sets of viaducts are thus 44 feet 6 inches wide, rather more than the width of Wilson's Arch The continuity of the southern viaduct, as has been already stated, is broken by the 'Ancient Hall,' and west of this it is replaced by the 'Secret Passage' already alluded to

The northern viaduct extends from these arches in the same direction as that to the south, it then trends somewhat more southerly, and runs north of and parallel to the Street of the Chain and the Secret Passage Between it and the Secret Passage is another series of vaults, about 16 feet wide, with thick piers These vaults, when examined, were full of sewage and water, and could only be sketched

The most easterly vault of the *northern viaduct* has a span of 13 feet, its arch is semicircular, with 15 stones, its flooring is on a level with that to the south (namely 2,398) Below it is a similar vault, the crown of the arch of which is on a level with the crown of the Ancient Hall In this chamber are some curious aqueducts, which communicate by a shaft with the aqueduct at a lower level found when breaking through the pier of Wilson's Arch The two vaults of the northern viaduct to the west are covered over with some building of later date—small passages with pointed arches, connected with the supply of water to the buildings above There are draw-well openings in the roof, and the marks on the sides caused by the rope of the bucket These passages are choked up with rubbish at their ends The vaults of the *northern* viaduct average 18 feet from north to south, and 14 feet span, with piers of about 7 feet 6 inches thickness; the vaults of the southern viaduct are about 16 feet from north to south, and 11 feet from east to west, with piers about 12 feet thick, the arches opening into the Secret Passage Between the two eastern

chambers of the southern viaduct is a vault at a lower level, the floor at the level, 2,390, runs east and west, in it there is a shaft to the depth of 14 feet, and from it an aqueduct running in a south-easterly direction, and cut off by the later buildings of the Mahkama.

Secret Passage

This passage is mentioned by Mejr ed Din, who, in speaking of the Street of David, states that it is 'so named from a subterranean gallery which David caused to be made from the Gate of the Chain to the Citadel called the Mihrab of David It still exists, and parts of it are occasionally discovered It is all solidly vaulted'

The Gate of the Chain (Bab as Silsile) lies immediately over the Pool al Burak, and the Street of the Chain (Tarik Bab as Silsile) runs west towards the Citadel or Tower of David, and along the western prolongation is called the Street of David It is certain, therefore, that the subterranean gallery referred to by Mejr ed Dîn should lie somewhere under the present Street of the Chain

For the first 110 feet from the Sanctuary wall this passage has disappeared, having made way for the more recent vaults at the Mahkama, but for a distance of 150 feet, that is to say, up to a distance of 260 feet from the Sanctuary wall, it has been discovered to be still in existence, a portion of it being used as a sewer, and other portions as tanks for water.

This passage has no appearance of great antiquity about it it appears to be Roman of a late date It has been suggested that its western entrance is probably that noticed in the ditch of the Citadel; but on the other hand, its entrance may be at the so-called Gennath Gate As it has only at present been traced one-seventh of the whole distance from the Gate of the Chain to the Citadel, it would be hazardous to speculate with too much certainty on its having connected the Citadel with the Temple, but it may be mentioned that there is a general impression among the inhabitants of the buildings about this line at the present day, that such a passage runs through under their houses, and that it has been divided into tanks and receptacles for sewage It is possible that it may yet prove to have been a water-channel only This passage is from 8 to 12 feet in

width, and is covered by a semicircular arch of cut stone; it is nearly choked up with sewage, so that it could only be examined with great difficulty at certain points. At its eastern extremity its floor-line is about on level 2,400 feet, the walls are about 8 feet in height, and the crown of the arch is about 8 feet below the level (2,419 feet) of the street above.

At the western extremity, 260 feet from the Sanctuary wall, the passage appears only to be about 8 feet wide, its floor is on the same level of 2,400, and the crown of its arch is about 8 feet below the level (2,422) of the street above. Above the crown of this arch probably runs the aqueduct from the Pools of Solomon.

This Secret Passage, at its eastern extremity (about 110 feet from the Sanctuary wall), is suddenly broken, the end being filled up with rubbish from above. If it ever continued to the Sanctuary wall, it would have passed over the southern and newer portion of the arch over the Ancient Hall, and along the trimmer arch to the south of the causeway vaults, and south of Wilson's Arch. There is an appearance of a break in the Sanctuary wall to the south of Wilson's Arch, by which the entrance may have been effected.

Westwards this passage runs almost immediately under the Street of the Chain. At first it is about 12 feet broad, but it gradually narrows to 8 feet in width. The arch is semicircular, of white *mezzeh*. On the north are to be seen the entrances to the vaults already mentioned, which form the causeway, and to the south is a door or opening.

At about 205 feet from the Sanctuary wall the passage was blocked up with a thin masonry wall, and there was here a drop of 6 feet to the bottom of the passage. The passage terminated at 220 feet in a solid wall to the west. The chamber or section thus cut off had a door to the south, which opened into a donkey-stable built in the side of the causeway.

The continuation of this Secret Passage was subsequently found to a distance of 260 feet from the Sanctuary wall. A section of it is here used as a tank, about 18 feet in length, and the breadth is about 8 feet.

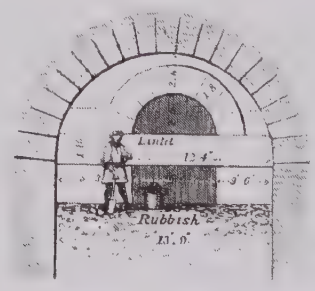
The plan of this passage was not completed before the vaults leading to it were closed up by order of the Pacha, but it is probable that there is not likely to be any great error in the sketch-plan given on Plate XXXV.

It may be supposed that the Secret Passage should run immediately under the roadway of the Bab as Silsile, but this is merely a matter of conjecture; and as it is known that there is a slight error in the ground-plan of the city at this part, no correction of the underground plan can profitably be made until that on the surface is examined, even on the supposition that one lies over the other.

It appears, however, improbable that the modern houses of the Moslems should necessarily follow the lines of a passage of the existence of which they are uncertain. It is also doubtful, however, whether the causeway and Secret Passage may not be of comparatively recent date, as is indicated by the discovery of an arched gateway or city postern nearly immediately below it.

Postern of ancient City Wall.

Close to the last section of the Secret Passage, at 250 feet from the Sanctuary wall, was found a vaulted chamber of peculiar shape, the crown of which was about 13 feet 6 inches below the bottom of the Secret



Passage. It had the appearance of having originally been a postern in the city wall, leading out eastwards; but if so, it must have been before the causeway was constructed.

In the vault leading to the cistern, or portion of the Secret Passage at 250 feet from the Sanctuary wall (see Plate XXXV.), is the mouth of a narrow shaft, at a level of 2,412 feet. At a depth of 25 feet this shaft opens into the crown of a vaulted chamber running nearly east and west, its western side on the plan being about 5 feet from the southern side of the Secret Passage.

This chamber is 14 feet 6 inches in length, 8 feet broad at its western end, and 10 feet 6 inches broad at its eastern end It is plastered The roof is peculiar it is a 'straight-sided,' pointed arch, the rise at the widest part being only 2 feet It was nearly full of rubbish A doorway, built up, was found leading into another vaulted chamber lying east and west, 18 feet long, and, like the first chamber, wider at its eastern extremity than at its western—12 feet wide to east, and 13 feet 9 inches wide to west There was no plaster about this chamber The arch appeared to be semicircular, of nineteen courses of nearly equal size

At the eastern end is a doorway 5 foot wide, with a lintel 12 feet 4 inches in length, and 1 foot 10 inches in height, and a semicircular relieving arch of 5 feet span Beyond this doorway is a passage 2 feet 6 inches wide, and covered over with blocks of stone laid horizontally At 10 feet to east this passage is closed by fallen masonry The entrance between these two chambers is 4 feet 6 inches wide, and is covered by a lintel 1 foot 9 inches in height, with a segmental relieving arch.

A hole was made 4 feet to west of the western chamber, but no continuation could be found, and it is possible that this may be a more recent addition to the eastern chamber. A broken volute of an Ionic capital was found in the eastern chamber

It has been suggested that these chambers may be the vestibule or guard-room to the postern of the city wall Nothing similar to the eastern chamber has been found about Jerusalem

Ancient City Wall.

Although the complicated nature of the causeway vaults makes it extremely hazardous to offer any conjectures as to the date when any portion was built, yet there is one conclusion at which all theorists appear to have arrived, viz, that the first city wall mentioned by Josephus lies along the northern edge of these vaults.

Josephus states (B J v 4, 2) that the first wall 'began on the north at the tower called Hippicus, and extended as far as the Xystus, a place so-called, and then joining to the Council House, ended at the west cloister of the Temple' Colonel Wilson says 'It is almost certain that

this wall crossed the deep ravine running down from the Damascus Gate at Wilson's Arch.'

It would thus join the Sanctuary wall about 650 feet from the south-west angle, and as it joined the *west* cloister of the Temple, the north-west angle of the Temple cloister must be looked for at least at some distance to the north of the Pool al Burak and Wilson's Arch

There is nothing at present known to bear out the suggestion that at the building of the second wall the first wall was pierced for through communication towards Siloam All that is known is that *after* the Roman period, during the Middle Ages, such a passage existed

The west pier of Wilson's Arch and the voussoirs are essentially Byzantine in their appearance, and quite distinct from the arches and vaults more to the west. Until there is a correct ground-plan of the buildings on the surface and of those beneath on a large scale, it will be premature to do more than make the faintest suggestions as to the original construction of the vaults and their precise object.

Possible Nature of the Causeway

Assuming that the northern side of the vaults defines the position of the first wall, the question arises whether these vaults are of the same age as this supposed wall (which is known to have been built in the Maccabæan period), or whether they are of more recent construction There is nothing in their construction which will warrant any closer identification than that they are Roman, and as such may be attributed to any period from the Roman procurators to Justinian.

The Ancient Hall alone can be considered of ancient type, and is of the same date, apparently, as the Sanctuary wall. If the Sanctuary wall is Herodian, then this Ancient Hall is probably Herodian also, and the Secret Passage and causeway vaults are comparatively modern, and Wilson's Arch is of so late a date that it affords no interest to those whose study is the topography of the Bible But if it be admitted that the Sanctuary wall at the Pool al Burak is of the time of Solomon or of the Jewish kings, then there is a possibility of the Secret Passage and causeway vaults being as old as the time of Herod

The following conjectures are put forward with much diffidence

During the time of Solomon or of the Jewish kings, the present Sanctuary wall at the Pool al Burak was constructed *from* the bottom of the valley, at which time there were only a few feet of red or virgin soil in the valley. The Ancient Hall was at the same time built, and was the Council House. It is to be noted that the floor of this Hall is 30 feet above the rock at the Noble Sanctuary, it may therefore have been constructed after the valley had commenced to fill up. In the time of the Maccabees the city wall was built, called the First Wall by Josephus.

Portions of this wall have been found on the northern side of the Upper City, south of the Muristán.

Either at the building of the wall or at some subsequent period a causeway was constructed along its southern side to join the Temple to the Upper City. Probably this was done when Akra was cut down.

Whether the present causeway vaults were built at this period or not can only be a matter of conjecture. When this causeway was built there was possibly a series of vaults, reaching up to the Sanctuary wall over the space now occupied by Wilson's Arch.

These causeway vaults are double, and run together east and west, and do not appear to be of the same age or construction. One set must be older than the other.

The *northern* viaduct appears to be more ancient. In after years this viaduct appears to have been added to by the southern viaduct, making up together a width of 44 feet 6 inches. At the same time the Secret Passage was constructed. This may have taken place in the time of Herod, or at a later period.

This Secret Passage passed over the new arch over the Ancient Hall, and probably was connected with the arch spanning the southern portion of the Pool al Burak, which has all the appearance of being more ancient than Wilson's Arch.

At the time of Constantine, when the present Holy Sepulchre was taken within the city walls, there was no object in keeping up the old First Wall at this point, as it had been broken down in other parts. Therefore a roadway was made along the Sanctuary wall at a level 2,366 feet, spanned by an arch 42 feet in width. Whether this was done

during the reign of Constantine or later must remain a matter of conjecture

After the destruction of the arch, the present (Wilson's) arch was constructed about the fifth or sixth century

The existence of the *City Postern*, with its semicircular and segmental relieving arches, so far down below the Secret Passage, is itself a strong indication that the latter is of comparatively modern origin

Twin Tunnel beneath the Convent of the Sisters of Zion

These souterrains occupy the space or ditch cut out of the solid rock along the ridge or backbone which once united Bezetha with the high rock at the north-west angle of the Sanctuary (probably the Antonia) This ridge runs from north-north-west to south south-east, and the souterrains follow this line They are inclined at about 111° to west of the northern side of the Sanctuary. The south-west angle of the west souterrain is 100 feet from the north-west angle of the Sanctuary, and the western side of this souterrain, if produced, will cut the Sakhra near its north-west corner

The western souterrain was discovered when the convent was built, and was described by Captain Wilson The passage leading to the Sanctuary was discovered and examined by Lieutenant Warren The eastern souterrain was first examined by M Ganneau and Lieutenant Warren The souterrains were cleared out in 1872 by Joseph Effendi, and a plan made by M. Schick and Dr Chaplin, when the lower portion of an ancient wall was discovered, and finally, the upper portion of the wall was described by Lieutenant Conder

These souterrains are parallel tunnels about 20 feet broad, and separated by a pier 5 feet 9 inches broad, and reaching, at the southern and northern ends, to the rock escarp and counterscarp The souterrains appear to have been covered at different periods The portion of them for about 80 feet to the south appears to be of different construction to that to the north. the arches differ, the width differs, and there is no rock visible on the east of the southern half.

M. Ganneau, however, states that he has ascertained, 'by sight and

touch, the existence of the rock, cut vertically along nearly the whole perimeter of the parallelogram' (Quarterly Statement,' 1871, p 106)

The Souterrain No 1, from scarp to counterscarp, measures about 165 feet It is entered by a flight of steps at the northern end, leading down from the kitchen of the convent The counterscarp is here about 40 feet high, reaching from 2,417 feet to 2,457 feet. The floor of the souterrain falls considerably (18 feet) in its length to south, until at the foot of the scarp it reaches 2,399 feet. The scarp is here about 57 feet high, reaching up to 2,456 feet The souterrains do not run straight through, but have a slight bend to the south at about 85 feet The western side has a rock scarp from 13 to 24 feet in height The eastern side, of masonry, is pierced with four arched openings leading into No 2

The arch is semicircular, of plain chiselled stone, except from 52 to 72 feet from the south end, where it has been replaced by a pointed arch. The springing has a gradual fall to the south of 6 feet There are flights of steps at either end leading to the surface, which appear to be of the same age as the covering arch

Souterrain No 2 is 127 feet long, and from 20 to 26 feet across, and is terminated at the south by the same escarp that terminates No. 1. To the north it does not run so far as No 1, and is terminated by a masonry wall of later date blocking up the tunnel

At the northern end the width is 20 feet for 45 feet, and is covered over by a semicircular arch of thirty-one courses At 45 feet the souterrain widens to 24 feet, and the arch has a slope to the south of 1 in 6, but the crown of the arch appears to remain horizontal, as it increases its span throughout its length of 36½ feet. For the remaining 46 feet there is another arch, whose crown is lower by 4 feet 6 inches

These two latter arches are nearly semicircular, but appear to be slightly pointed The springing of the arch to the east appears to be on the rock

The pier between these two souterrains is pierced by four openings, each about 10 feet wide.

Water was brought from the north into Souterrain No. 1 by means of an aqueduct, which still exists, and will be described later

Rock-hewn Passage

From the south-west corner of Souterrain No 1 is a rock-hewn passage or aqueduct about 4 feet wide, running nearly due south along the western side of the Sanctuary wall, apparently to Tank 22.

At about 16 feet from the entrance it trends to the west for 6 feet, and then pursues its course to the south for about 60 feet There is a dam 10 feet high, which is provided with a sluice for letting off the water when necessary

At about 150 feet from the dam is the passage to the east, leading to the chamber in which is the ancient masonry with pilasters, and a few feet further the aqueduct turns sharp round to the east, and meets the masonry of the Sanctuary under Bâb es Serai

The aqueduct is rock-hewn as far as 200 feet from the pool, opposite to the small passage, and is covered with slabs and columns At the entrance the roof reaches up to about 2,452 feet, or about 30 feet above the level of the water held up in the dam Beyond the dam it slopes down to 22 feet, and eventually to 8 feet

South of the passage the rock runs out, and only appears in the lower portion to a height of two or three feet, the passage being of masonry with an arched covering The level of the bottom of the aqueduct near its south end is 2,406. The rock has here a level of 2,409

There are several shafts leading down through the crown of the aqueduct arch for the purpose of obtaining water

Above the covering arch is a handsome stone pavement of great thickness and solidity, which extends as far as the Ecce Homo Arch. M Ganneau believes it to be of the time of Hadrian.

From the scarp at the north-west angle of the Sanctuary to the scarp visible at the south end of the Twin Pools, measures about 100 feet of solid rock.

In cutting the northern ditch of the Antonia, the aqueduct which comes from near the Damascus Gate was apparently cut through, and again when building the ancient west wall of the Sanctuary

It is possible that the space where there is water running between the Bâb es Serai and Bâb en Nazir, may be the hollow space within the two mentioned by Josephus, but our knowledge of the ground is yet too

imperfect to admit of anything more than mere speculation The two souterrains are probably the Twin Pools, identified by Eusebius and the Bordeaux Pilgrim with Bethesda, and M Ganneau identified this site with the pool Strouthion, mentioned by Josephus (B J v 11, 4) in his description of the attack on the Antonia by Titus. He thinks that during the period of Ælia Capitolina the pool was closed up, and the fine stone pavement above was laid, and that the Ecce Homo Arch is of the same date, built as a triumphal arch to celebrate the victory over Bar Cochebas ('Quarterly Statement,' 1871, p 106)

The bottom of the aqueduct appears to have been plastered, and there is a small water channel in it which may have been used when the water became low. There are recesses which are supposed to facilitate the collection of water, but this is doubtful

North-West Angle of Sanctuary.

The rock appears on the surface in the interior of the Sanctuary, immediately north of the Bâb en Nazir, or 'Gate of the Inspector,' and the levels of its surface gradually increase northwards into the corner of the court On the north side of the Sanctuary a rock scarp, facing southwards, runs east for 350 feet, with a maximum height of 32 feet. At the east end its height is only about 20 feet, and under the north-west minaret (of Kalawûn) it is 30 feet; the levels of the top being in the first instance 2,433, and in the second 2,460 This scarp is the south face of the block of rock on which the modern barracks are built The position of the north face, or scarp, of the block is only known when it appears at the south end of the Twin Pools; and the east scarp is also unknown, because it is hidden by buildings

From the internal corner of the Sanctuary court, under the above-noticed minaret, a scarp facing east runs past the Bâb al Ghawanmeh almost as far as the Bâb es Serai. The level of this scarp decreases rapidly as it extends southwards At the point shown on the plan (Plate XXXVII.) the scarp stops, and its top is here only 3 feet above the level of the rock surface in the Sanctuary court, which is about 2,431 at this point. The scarp here turns west (as shown on the plan), and runs as far as the rock-cut aqueduct from the Twin Pools. The foot of

this part of the scarp, as visible in the aqueduct, has a level 2,409, so that this scarp (which faces southwards) is at least 22 feet high. How much further west it may run from the aqueduct could not be ascertained without the destruction of masonry in the aqueduct, but the known length of the scarp in question is 37 feet. The result of these observations is, briefly, that the great block of rock at the north-west angle of the Sanctuary is L shaped, the one limb measuring 350 feet east and west, the other 120 feet north and south. The north and west sides of the block are hidden by buildings, and it is not known what scarps may exist in these directions.

The lower part of the Bâb al Ghawanimeh consists of rock-cut jambs, and there are steps at this gate descending into the Sanctuary from the street outside, which is on a level 6 feet above the level (2,431) of the Sanctuary court at this point.

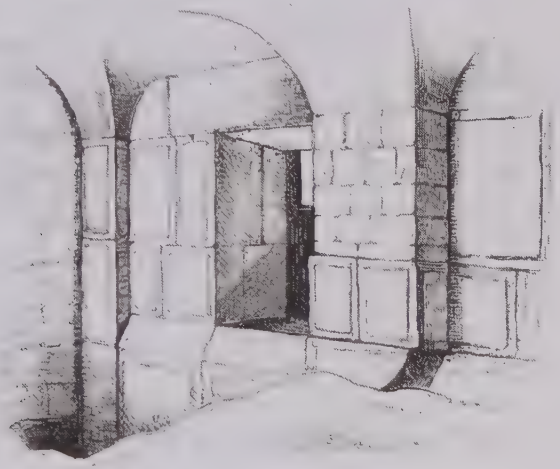
Beneath the Bâb es Serai an ancient wall is visible, where the aqueduct from the Twin Pools stops after turning sharp round eastwards. This wall was measured by Herr Schick in 1872, and in the next year Lieutenant Conder discovered that the ancient masonry reaches up even higher than the level (2,431) of the interior of the Sanctuary. Through the roof of the aqueduct Lieutenant Conder gained access into a small modern chamber, built against the Sanctuary wall, just north of the Bâb es Serai, and here he found part of a wall of large drafted stones, with a plinth course and two pilasters, like those in the Hebron Haram. The space between the pilasters was occupied by a window, or opening into the Sanctuary, which seems to be ancient, as the lintel and jambs are of large ashlar—the former drafted.

This ancient wall is parallel with the west Sanctuary wall. It is 8 feet thick, and its inner or east face appears to coincide with the line of the outer face of the west Sanctuary wall where known further south. There is thus clearly a set-back of 8 feet on plan at some point on the west side of the Sanctuary walls, and although the exact point is unknown, it is most probably at the Bâb en Nazir, where the rock surface inside the Sanctuary suddenly drops beneath the existing surface.

The ancient wall measured by Herr Schick presents one whole course and parts of two others visible in the aqueduct. The whole course is 4 feet 6½ inches high. The courses set back 3 or 4 inches, the marginal

drafts are 6½ inches wide at top and bottom of the stones, and 3 inches to 4 inches at the sides. They are about ½ inch deep.

In the chamber above the aqueduct four courses of ancient masonry were visible. The lowest of these was bevelled back between the pilasters (as at Hebron), forming a plinth, and giving a projection of 1½ feet to the pilasters. The southern pilaster is 4 feet 9 inches broad, the northern (which is partly rock-cut) is only 1½ feet wide; the interval between is 8 feet 9 inches. The top of the plinth course has a level



of 2,431, or about equal to that of the surface of the ground inside the Sanctuary.

The height of the courses visible in the chamber above the aqueduct has not been recorded. It is probable that there are in all five courses above the highest one seen in the aqueduct, as the plinth course has its top 22 feet above the aqueduct, giving a height of 4 feet 6 inches for each of the unseen and unmeasured courses, almost exactly the same as the height (4 feet 6½ inches) of the course seen in the aqueduct.

As regards the probability of the plinth course here found having run all round the walls of the Sanctuary, with pilasters at intervals, as at

Hebron, it should be remarked that the ancient wall is never found as high as this level (2,431) in any part save at the north-east angle of the Sanctuary, where the ancient masonry remains *in situ* in the east face of the tower (the so-called Tower of Antonia) up to a yet higher level (2,440). There is therefore nothing to show whether the pilasters and plinth existed on all sides, and they certainly did not exist in the face of the north-east tower

The North-West Minaret

The north wall of the Haram, near the east, forms the south wall of the Birket Israil, and is at right angles to the east wall Its production westwards will be found to cut the production of the west Sanctuary wall at the north-west angle of the north-west minaret (called Kalawûn's). The two lines meet at an angle of about 85°. The minaret, which is on the highest part of the great scarp already described, thus stands on the north-west angle of the Sanctuary walls

The commanding site on the top of the great rock scarp, which is known to have been separated from the Bezetha hill by a trench, of which the Twin Tunnel (next to be noticed) formed part, is generally recognised as the site of the Antonia, and it is worthy of notice that in this case the barracks, the old Serai (or Pasha's residence) and the military Governor's house stand on the site of the Roman garrison and Governor's house

Deductions North-west Angle

There are now known to be two ditches to the north-west and south-east of the rocky knoll at the north-west angle, as shown on Plan These ditches are cut perpendicular to the backbone of the hill, running from north-north-east to south-south-west.

The southern ditch can only be seen on the surface · it appears to be 160 feet wide (see section), and may be 20 feet deep. The northern ditch is apparently 165 feet wide, and 30 feet deep, but is deepened to 57 feet opposite the highest point of the rock, where the souterrains now stand. From ditch to ditch measures 380 feet. Between these two

ditches the rock is low from the Bâb en Nazir to Bâb es Serai, and here there may be either a natural depression from the west or else a deep cutting.

The counterscarp of the northern ditch is probably connected to the west with the remarkable rock escarpment running west to the Austrian Hospice (described later). The aqueduct which enters the ditch on north at level 2,417 leaves it again at level about 2,420.

C. W

TANKS INSIDE THE SANCTUARY

The first twenty of these were planned by Captain (now Sir C) Wilson The level of the rock was ascertained in them by Captain (now Sir C) Warren A few additional notes were obtained by Lieutenant Conder and Herr Schick The numbers here given are the same as those on the Ordnance Survey for all the tanks planned by Sir C Wilson

No 1 North of the Dome of the Rock, under the platform It is about 130 feet long north and south, and 24 feet wide and 30 feet deep from the level of the surface of the platform The lower 18 feet is cut in rock, and a segmental arch forms the roof, consisting of small well-dressed voussoirs with a narrow keystone and gradual widening of the other voussoirs towards the haunches The level of the rock surface is 2,427 The tank is cemented throughout. The northern end is closed by a massive wall, also cemented over the masonry, and the voussoirs appear to run past this wall, which is not built square to the sides of the tank It appears, therefore, that the passage may continue further north behind the present wall. The manhole in the roof, by which the tank is entered, is at the south end, and the south side of the tank appears to consist mainly of rock rudely hewn and cemented over It has, however, been conjectured that the tank may also originally have extended further south.

No 2 A large tank, about 60 feet by 50 feet, in the north-east part of the platform It was said by the sheikh of the mosque to communicate with No. 34, but there is no indication of this The rock surface is 2,429 at 6 feet from the surface of the platform. The total depth is 47½ feet

No. 3 West of No 1. Consists of three chambers divided by piers

The walls are of rock, and slope outwards towards the floor. The narrow top is roofed by a segmental tunnel vault, as in No 1 This tank has a total depth of 32 feet from the surface of the platform. The rock surface has a level 2,426 at 9 feet below the present surface Towards the south the tank is entirely roofed in rock The two side chambers to the west are divided off by a wall of inferior masonry, with low arched doorways The end of the main passage on the north is closed by a wall like that in No 1 The interior is cemented over both rock and masonry. The elliptical roof described in the northern part of this tank by Sir C Wilson is due to the way in which the rock is cut immediately beneath the segmental arch of the vaulting, as was observed in 1874, when Lieutenant Conder examined this and No. 1 tank by magnesium light Sir C. Warren suggested that No 3 tank is the bath-house of the Temple mentioned in the Talmud. The production of the main gallery of No. 3 cuts the production of the gallery of No. 1, if both are produced northwards, just at the north wall of the platform, where the subterranean gate Tadi appears most probably to have been placed, as shown on the plan (Plate VI) The ground in this vicinity has a hollow sound There are two manholes in the roof of No 3, and in November, 1867, a rock-cut channel bringing surface water to the tank was examined. It runs north and south, with small side ducts from the east and west

No. 4 A small retort-shaped cistern with a long shaft. It is 37 feet deep, the rock-surface being at 2,417, or 18 feet below the present surface. An ancient mouth in the shaft occurs 11 feet below the present surface. This tank is beneath the platform west of the Dome of the Rock.

No 5 In the south-east corner of the platform, has an entrance with a flight of steps at its east end, ascending southwards to the surface outside the platform, and a manhole at its west end, down from the platform This tank is a long passage, with recesses on the north and another at its west end running south. The main passage has a semicircular vaulted roof, but the branch on the east is cut entirely in rock The floor is 48 feet below the platform surface The rock surface is 2,425 at the west end, and 2,408 at the entrance on the east, where are remains of a door. The former level is 10 feet below the platform level; the latter level is 8 feet below the present surface of the Sanctuary The modern name of this tank appears to be Bir er Rummâneh, or 'The Well of the

Pomegranate' Sir C Warren places the altar of the Temple over the north-west end of No 5 tank. According to Lieutenant Conder's plan, the manhole at the north-west extremity would have been just outside the 'Water Gate' of the Priest's Court.

It may be here noted that the Cell of Bostam, according to Mejr ed Din, was under the platform on the east A door, with a window to the north of it and another to the south, is visible on the east wall of the platform, north of No 5 tank and south of the eastern steps. These three apertures are now closed up, but the levels of the rock in No 5 tank render it probable that the south-east part of the platform is supported on vaulting The Cell of Bostam was, however, already closed in the time of Mejr ed Din In 1881 an attempt was made to obtain permission to open this doorway and explore the unknown cells and vaults This was not only refused, but a large heap of earth was soon after piled in front of the closed doorway by order of the architect of the mosque, completely hiding the platform wall on this side. The known levels of the rock render it extremely important that the supposed vaults in this part of the platform should, if possible, be explored in future

No 6. A tank T shaped on plan, east of el Kas, near the Great Sea. (No. 8), between the Aksa and the platform. It is 41 feet deep. The southern branch, which is 25 feet long, has its floor raised 4 feet 8 inches above the rest of the tank The cistern has the shape of a hollow truncated pyramid above, the roof is partly of rock, partly of stone slabs laid flat on the rock surface. The level of the rock surface is 2,410 feet 6 inches, and it is $5\frac{1}{2}$ feet below the present surface of the ground

No 7. Appears to be called el Bahr, or the 'Sea' (or lake) It is east of the last, and 62 feet deep. The main part is a rock-cut chamber with two entrances on the east, 6 feet above the general level of the floor leading to a side chamber with lofty roof On the south is a branch running east, and in this four steps lead up to a flat platform The roof of the excavation is rock throughout, the general level being 2,411, or 5 feet below the present surface. This cistern has two mouths near each other A surface conduit is visible, entering the tank high up

No. 8 Usually known as the 'Great Sea,' is called by the natives Bir el Aswad, or 'The Black Well.' It is a fine cavern with rocky

piers, reached from the south by a narrow staircase It is 43 feet deep, being partly roofed in rock and partly with flat stones It is the largest of all the Sanctuary tanks, and has numerous manholes from the surface, three of which are in use. The floor, where visible (when the water is low), consists of a sort of limestone shingle The rock surface is at the level 2,411, or 5 feet beneath the present surface A conduit enters this tank from the east On the north-east there is a small circular chamber The capacity of this tank is at least two million gallons.

No 9 Called Birel Warakah, or 'Well of the Leaf,' is under the Aksa Mosque, south of the last. The general rock surface is about 2,400, though this has not been ascertained with exactitude This tank is 42 feet deep There is a branch on the north and a central pillar supports the roof, which is of rock The name is due to a legend related by Mejr ed Din, according to which, in the time of Omar, Sheik Ibn Habashah, of the Beni Temim, let his bucket fall, and descended to recover it He found in the well an entrance to Paradise, and brought back a leaf of the 'tree of life' with him. An aqueduct leads from the Well of the Leaf through the passage of the Double Gate under the Aksa Various ducts conveying surface drainage into the Well of the Leaf were also found about 5 feet below the present surface of the Sanctuary

No. 10 East of the last, and on the west side of the passage from the Triple Gateway It is 30 feet deep, and is reached through a hole in the wall of the passage just mentioned It is now dry, and the manhole in the roof (which is of rock) is closed. The rock has a surface at 2,387, for 31 feet below the present surface of the Sanctuary over this tank, which is a long passage leading in the direction of No. 9 and No 32 On the south-east it communicates with the rock-cut channels which run under the Sanctuary wall below the Triple Gate

No 11 North of the last and of the old part of the passages from the Triple Gate It is 61½ feet deep, and consists of three tanks, each about 26 feet by 40 feet, connected by a passage running north and south, and 14 feet wide The total contents are about 700,000 gallons. The roof is of rock cut out into arches Steps on the west ascend to the mouth of the tank, and west of these are foundations of a massive wall on the rock The passage from the Triple Gate is continued so as to run

over this tank. The general rock surface is about 2,397, or 19 feet beneath the present surface as determined on 11th November, 1867

No 12 East of the platform, and south of the next two, a rectangular tank 44 feet deep The roof is a semicircular vault The rock which appears on the present surface towards the north end of the tank has a level 2,406.

No. 13. Immediately north of the last, is of irregular shape, 40 feet deep and about 30 feet square The sides are vertical, the roof is partly domed in rock. A conduit for surface water from a small cistern 250 feet further north comes in on the east side of No. 13. The rock on the present surface has here a level of about 2,409

No. 14 A pair of chambers 29 feet deep They appear to be natural caverns, which have been enlarged. The roof has a plain semicircular vaulting The rock here appears on the present surface at a level 2,409

No 15 North of the last and west of the Golden Gate. It is about 18 feet in diameter, and nearly circular. The depth is 35 feet, the whole being cut in rock, with a roof also of rock. The rock surface is at a level of 2,393, or 15 feet below the present surface.

Nos 16 and 17 Near the Birket Isrâîl. These two mouths lead to a single quadrangular tank, entirely of masonry, with four large piers, from which groined vaults with pointed arches spring The total length is 63 feet north and south, by 57 feet east and west The inner face of the wall on the north side is $23\frac{1}{2}$ feet from the face of the Sanctuary wall, which forms the south side of the Birket Isrâîl. The arches, which spring from the south faces of the two southern piers, appear to be either continued beyond the present walls of the tanks, or are simply flying buttresses The remaining arches are stilted and pointed. The piers and arches all differ from each other in dimensions The crowns are about 28 feet from the floor, and the springings 14 feet from the floor. This tank was first visited in January, 1869, by Sir C Warren, and again by Lieutenant Conder, in 1874 Some large blocks have fallen into the tank, some of which are 3 feet square and 7 feet long. The floor is about 45 feet from the surface of the Sanctuary, which has here a level of 2,413. On the south wall of the tank is a staircase, which led down till recently from the Sanctuary. A grating 2 feet square in the north wall

(visible from the Birket Isrâîl) lets light into the tank In 1874 part of the vaulting was broken in, and the interior was therefore visible from the surface of the Sanctuary In general appearance this reservoir resembles the Moslem work of the thirteenth century at Hebron, Ramleh, etc, and there can be little reason to doubt that the reservoir dates about the time when the Moslems repaired the Sanctuary after the expulsion of the Crusading Christians. The arches have ribs of cut stones, and the groined vaults between them are of rag-work, an arrangement found in the later Crusading work, and in the Moslem buildings of the thirteenth, fourteenth, and fifteenth centuries.

No 18 In the north-west part of the Sanctuary near the Bâb es Serai is a tank 10 feet by 7 feet and 37½ feet deep. The rock surface has a level 2,414, or 4 feet below the present surface

No. 19. (So numbered in the 'Ordnance Survey' Notes) Is part of the passage from the Prophet's Gate (or so-called Barclay's Gate), mentioned under that head.

No 20 The continuation of the same passage southwards. No rock occurs in either of these two last Their floors have a level 2,374

No 21 In the north-east portion of the Sanctuary, east of No 18. This is a tank 24 feet by 12 feet, and 21 feet deep It is entirely built in masonry, and no rock is visible

No. 22. Near the Bâb en Nâzir, south of No. 18. This is a large rock-cut reservoir with a domed roof of rock. It resembles the domical caves at Beit Jibrin, and like them it has a rock-cut staircase running round the wall There are two manholes in the roof, both now closed The surface of the rock has a level 2,416, or 4 feet below the present surface It should be noted that the aqueduct from the Twin Pools may have been originally cut to fill this tank, or No. 18, the floor of which is 16 feet below the level of the aqueduct channel, where it cuts the west Sanctuary wall.

No 23 North of the north-west corner of the platform This is a retort-shaped tank, 8 feet in diameter, and 35 feet deep. The rock appears on the present surface at a level 2,429

No 24 On the platform north-west of the Dome of the Rock. This is not properly speaking a tank at all, but a chamber, with its floor and part of its east wall made of rock, and sinking below the level of the

platform. The upper part of the chamber is of comparatively modern masonry, and the place is used as a store. The interior was revisited by Lieutenant Conder in 1872. The floor is of rough rock, falling westwards at an angle of about 30°, and the level near the east wall of the chamber is 2,425. A rock scarp 7 feet 8 inches high is here visible, running north and south between the masonry piers which support the groined roof of the chamber. It is finely finished, and has a bearing of about 185°, the level of the top is 2,433, or about 2 feet below the surface of the platform. The levels in No. 25 seem to indicate that this scarp may continue rather further south. Further north the rock is visible in the Kubbet el Arwah (at 2,435), but is known to be about 2,426 on the west of the Kubbet, in the Kubbet el Khidr. If the platform were removed a scarp might probably be found running north on the line above noticed to an intersection with the north boundary of the platform. On the south it probably does not extend very far, as the contours of the rock clearly indicate. According to Captain Conder's view this scarp may have been connected with the Soreg, or boundary, dividing off the area of the Temple, which no Gentile might enter.

No. 25. South of the last, is 12 feet in diameter and 37 feet deep. The rock appears at 2,416, or 20 feet from the surface.

No. 26. A small cistern west of No. 16. No rock is visible.

No. 27. A small cistern cut in the scarp on the north side of the Sanctuary.

No. 28. This is outside the platform on the north-east. It appears to be called Bir el Habash, or 'the Well of the Abyssinian.' It is about 10 feet in diameter, and cut in rock. The level of the rock surface is here 2,412, or 3 feet below the present surface. This cistern is just north of the production of the rock scarp in No. 29, but its level is important as showing that the scarp does not probably extend far east.

No. 29. This is not a tank, but a masonry chamber built under the present surface against the north retaining wall of the platform. It was discovered by Sir C. Warren in 1868, and thus described. An arched passage 18 feet span runs east and west under the steps of the eastern flight leading from the north wall of the platform. The vault is choked at each end, the length visible being 65 feet. On the south are four deep arcades between piers running back southwards to the line of the north

wall of the platform The piers are partly of rock, partly of masonry, built on north of the rock, the bays are from 11 feet to 13 feet span, and about 16 feet deep The piers are 3½ feet thick The backs of the bays are formed by a scarp of rock, the level of the top of which is 2,420, or 17 feet below the surface of the platform The rock portions of the piers project about 6 feet from this scarp. The crowns of the arches in these vaults are only about 2 feet below the present surface outside the platform, the rise from haunch to crown being 9½ feet. The vaulting of the bays is groined into the vault of the main passage, which has a parabolic section, while the bay arches are pointed The whole of the voussoirs are small, the stones being about 15 inches by 4 inches. There is no appearance of rock on the north side of the vault, save in one place (as marked), about the level 2,410. The masonry of the vault is in parts of ashlar, large and small, in part of rubble. There are two recesses in the masonry of the north wall as shown, 2 feet wide, 6 feet high, and 8 feet to the back, where they are choked. The ends of the bays above the rock are filled in with coarse rubble There is no cement or plaster in the vault The floor of the chamber is not of rock, and the rock scarp may run down to some depth below it Rock, however, occurs at the level 2,412 further east, so that the floor of the vault is probably not very far above the rock. The vault itself seems clearly to be Arab work not earlier than the thirteenth century, built on to an ancient scarp, which, according to Sir C. Warren's plan, is the northern limit of Herod's Temple enclosure.

No 30 This is the passage piercing the west wall of the Sanctuary west of the Dome of the Rock. It corresponds to the passage (Nos 19 and 20) from the so-called Barclay's Gate, and the two passages together represent the two western or Barbar entrances to the Temple enclosure, according to the plans of Sir C Warren and of Captain Conder The passage (No 30) was first described by Sir C. Wilson in the 'Ordnance Survey' notes. No rock occurs in this passage, now used as a tank with two mouths The sides and floor are cemented, the length is 84 feet east and west, the breadth 18 feet north and south. It is 34½ feet deep, and the bottom is at the level 2,390 A modern flight of steps leads down into the passage The roof is a round arch of well-dressed stones without mortar.

No. 31. Immediately outside the platform on the west is a small cistern in a garden.

No. 32. A small tank in the Aksa Mosque, apparently connected with No 8.

No 33 A small tank north of the Aksa Mosque, under the stairs leading to the passage from the Double Gate.

No 34 Is on the platform just south of No. 2. It is a rock-cut cistern of irregular shape, about 60 feet in diameter. The surface of the rock has a level 2,431. A passage from the north-east side of this tank runs in 10 feet, and then appears to stop

No. 35. Is close to the east end of the great scarp on the north side of the Sanctuary It is an ordinary cistern cut in rock

No 36 West of No 6, which it resembles in plan, it is cut entirely in rock

No. 37. Was examined by Herr Schick, a little west of No 13 The mouth is shown on the 'Ordnance Survey.' The excavation runs west in the direction of No 34, passing beneath the east wall of the platform. The whole is cut in rock, which appears on the surface at the level 2,420.

C. R. C.

EXCAVATIONS ON OPHEL

The junction of the Ophel wall with that of the Sanctuary has already been described in speaking of the excavations at the South-East Angle South of the Sanctuary this wall was traced for a total distance of 800 feet, with results perhaps more important than any which have been gained by exploration in Jerusalem

More than fifty shafts were sunk by Sir C Warren in various parts of the spur, south of the Sanctuary, and the levels of the rock were determined in no less than twenty places These levels are of great importance in connection with some of the more recent controversies, and the more important are here given according to the shafts which are shown on the Plans

Shaft No.	XVI	Rock Level	2,280.
„	XXXI	„	2,270
„	XXXIV	„	2,320
„	XXXV.	„	2,258
„	XXXVI	„	2,271
„	XXXVIII.	„	2 303

South of the wall the rock was traced along the crest of the spur as far as the point where Doctor Guthe afterwards excavated Three shafts on this line give levels 2,274, 2,270, 2,264, showing a gradual and steady fall of the crest southwards The observations of the rock on the surface further south, and in the passage and shaft from the Virgin's Fountain, agree with the above-mentioned levels, and allow of the contours of the spur being traced with confidence The conformation of

the rock is similar to that of the present surface, showing a narrow spur sinking gradually in the direction of the Pool of Siloam

The application of the name Ophel on this spur is a matter of opinion. The radical meaning of the word is a tumulus or 'swelling,' either applicable to the spur generally, or to a knoll towards the northern part of the spur. The A.V (margin), however, understands 'tower' (2 Chron. xxvii 3, xxxiii 14), and the Targum on the first of these passages renders it by 'the interior palace,' or fortress. Josephus mentions Ophel (5 Wars iv 2) in connection with the junction of the city wall with the east cloister of the Temple, and it is possible that the name should be restricted to the vicinity of this great tower, which was discovered during the excavations.

The wall and the curious cavern south of the Triple Gate will now be described The great tunnel from the Virgin's Fountain which is cut through the Ophel spur, together with that spring and the Pool and inscription of Siloam, will be found described in Part II, under the headings, ''Ain Umm ed Deraj,' and ''Ain Silwân.' The excavations of Dr. Guthe are noticed on a later page in speaking of the explorations which have been made in Jerusalem since 1869

The Ophel wall was found to be 14½ feet thick, with vertical faces built up without any batter. At the South-East Angle of the Sanctuary the highest remaining course was discovered to be only 4 feet below the present surface (or at a level 2,352), and as the rock on the east face of the wall at this point has a level 2,278, the wall stands no less than 74 feet in height. The highest course consisted of drafted stones, and is 3 feet 9 inches in height Beneath this the courses only average 1 foot 9 inches in height. These smaller stones are not drafted. The wall was examined on its west face near the junction with the Sanctuary wall, and at a depth of 30 feet the character of the masonry was found to change Above this level the stones are well dressed and carefully cut and squared, below the same level (2,322) the wall consists of rough rubble This does not extend to the rock, but is founded on a layer of hard clay over the rock. Near the Sanctuary a gallery was driven through this clay under the foundation of the wall until it reached a previously constructed gallery on the opposite or west side of the wall

The change in the character of the masonry above noted was observ-

able throughout the whole course of the Ophel wall, and it might perhaps hence be deduced that the lower part of the wall was never visible, and that the rock was hidden at a depth of about 40 feet below the surface when the Ophel wall was built. The excavations for the foundations appear to have been sunk to the surface of the clay, whereas in the case of the Sanctuary wall they were carried down lower, so that the bottom courses are let into the rock

The Ophel wall abuts on the Sanctuary wall with a straight joint, being vertical, its east face does not run flush with that of the Sanctuary wall, which is built with a batter. At the top the Ophel wall projects 1½ feet eastwards beyond the face of the Sanctuary wall, and at the bottom (70 feet lower) it recedes 2 feet behind the face of the Sanctuary wall westwards There is no sign of any gateway at this junction, and there is good reason to suppose that the Sanctuary wall and the Ophel wall were not built at the same time Sir C. Warren believes that the Sanctuary wall is shown to be the older of the two because the rubble foundations of the Ophel wall might indicate a great accumulation of rubbish on the hill at the time when this rampart was built, if they were never intended to be visible.

The bearing of the Ophel wall is the same (352° 30′ true bearing) as that of the Sanctuary east wall for 90 feet south of the South-East Angle of the Sanctuary, at this point there is a tower on the Ophel wall, projecting 6 feet, with a face 24 feet broad The wall then turns south-west, and was traced for 700 feet, when it appeared to stop. Three other towers like that at the angle were found along its course, as well as a large tower projecting eastwards. This projecting fortification has on the north-east side a kind of corner turret which projects 22½ feet from the wall, with a face 26 feet broad There was possibly a corresponding turret on the other side, while the main part of the tower projects 41½ feet from the wall, and has a face 80 feet broad The faces of this tower, as will be seen on the plan, are not quite at right angles to each other. The south face is 475 feet from the corner, where the wall bends towards the south-west, as above described

There can be little reason to doubt that the great tower thus described is the one mentioned in the Book of Nehemiah as the Migdol ha Jutza, or 'tower that projects' (Neh iii 25), and this building constitutes

therefore an important fixed point in the topography of ancient Jerusalem.

The masonry in the corner turret of the great tower consists of large drafted stones, 2 feet to 3 feet high, and 4 feet to 8 feet long, with roughly hewn bosses. The base is founded on a rock scarp, and is 5 feet below the level of the base of the wall. The rock beneath is scarped to a height of 14½ feet The natural rock surface is here falling very rapidly eastwards The face of the great tower itself consists of stones 1 foot to 2 feet high, and 2 feet to 3 feet long It is now standing to a height of 66 feet, and is founded on rock. The south-west face is much decayed. The wall is plastered in places, as on the large drafted stones of the corner turret. Beneath the rock scarp just mentioned there is a water channel, 10 feet high and 1½ feet wide, sunk at the foot of the scarp. The scarp was traced 25 feet north-north east, when a rough wall took its place

The first shaft sunk in the examination of this rampart was at 37 feet south of the South-East Angle of the Sanctuary. It struck the rock at a depth of 53 feet on the east side of the Ophel wall A gallery thence was driven to the Sanctuary wall. A wall was found 4 feet thick, and 15 feet south of the south Sanctuary wall, running parallel to the latter westwards from the inner side of the Ophel wall This foundation, like the Ophel wall, consisted partly of *melekh*, partly of *mezzeh*, or very hard limestone

The Ophel wall was found to stop suddenly on the south, and about 200 feet further south-west in the same line, the rock appears to rise in a kind of knoll, the rock surface being only about 12 feet below the present surface (or at a level 2,474) It is probable that the masonry of the Ophel wall has been removed in this vicinity, being easily reached, and the stones may perhaps be now built into the south wall of the present town. The same removal of masonry has also apparently occurred in the case of the Third Wall on the north side of Jerusalem, where no great accumulation of rubbish existed to conceal and protect the ancient ramparts.

The Ophel wall appears possibly to have been built up in two or more steps, with a pathway at the foot of each The same arrangement is also noticeable in the case of the rock scarp in the Protestant Cemetery

(See Part II., heading 'Hammâm Tabariya.') The three smaller towers on the wall above mentioned project about 6 feet, and have faces 22 to 28 feet broad. The first is at 310 feet from the angle with corner tower, the second at 425 feet, the third at 575 feet. The rough rubble already noticed at the base of the wall has an average thickness of 20 feet, and above it is a plinth course setting back 6 inches, on which the masonry of cut stone rests. Only a few courses of these cut stones remain in some parts, and some are as much as 2½ feet in height, with lengths varying from 2 to 4 feet.

Sir C. Warren was of opinion that the stones in the Ophel wall were not *in situ*, but that they had been re-used. It appears also that some outer retaining wall may exist, which may have banked up the soil so as to cover the rough rubble if the latter were not intended to be seen.

A scarp 12 to 14 feet high was found running south-east and north-west at the knoll above mentioned, which is 200 feet along the line of the Ophel wall south-west of the point where it appears to stop. A scarp only 3 or 4 feet high was found by Dr. Guthe, on the hill immediately west of the Virgin's Fountain. These scarps seem to indicate that the Ophel wall took a bend eastwards. The masonry of a small tower excavated by Dr. Guthe is of a character similar to the smaller well cut masonry of the Ophel wall, and this may perhaps be a continuation of the wall. Further excavation would, however, be necessary before any certainty could be felt in the matter.

The question of the date of the Ophel wall is one of considerable difficulty. Sir C. Warren believes that a great accumulation of rubbish, and perhaps of clay soil on the rock, occurred after the Sanctuary wall was built and before the Ophel wall was constructed. It must not however, be forgotten that Sir C. Warren proved in the case of the Sanctuary wall that rubbish already existed when it was built, through which the foundations were sunk to reach the rock. It is, moreover, not certain that the rubble base of the Ophel wall was from the first invisible, for no traces of any outer retaining wall serving to keep up the earth or rubbish against the outer face of the rubble have been found. It may perhaps prove to be the case that the rubble and the cut stone represent two building periods. The cut stones in the wall (exclusive of the large drafted stones used in the top course and in the outlying tower) resemble

in character the Roman masonry of the second century A D , or even later. The rough rubble and the rocky scarps may perhaps represent the older part of the rampart, and may be referred with considerable confidence to the time of Nehemiah The cut stones, together with large drafted stones like those in the Sanctuary wall (but, as Sir C Warren notes, re-used), may in their present positions represent the work of Herod, of Agrippa, or Hadrian, or even of some later Roman builder, thus agreeing with the conclusion which Sir C. Warren reached on the spot, that the Ophel wall as at present existing is later than the Sanctuary wall. The fact that the Ophel and Sanctuary walls have the same bearing at the junction is, however, important, because it might be thought that the obtuse angle at the south-east corner of the Sanctuary resulted from the building of the east wall of the Sanctuary in a line with the already existent Ophel wall

Rock-cut Cave South of the Triple Gate.

Two shafts were driven early in 1869 with the object of ascertaining whether any wall coming from the south ever joined the Sanctuary wall at or near the Triple Gateway. The first (No 34) was 132 feet south of the gate, west of a cistern rock was found after 22 feet (or at a level about 2,340), and in a drain at this level a number of lamps of pottery and glass bottles were found, supposed to date about the third century A.D. A gallery was driven 25 feet west along the rock, but no wall was found The owner of the adjoining property objected to the gallery being continued further west A cistern was found east of the shaft, with a cross (of St. John) moulded in the plaster of a small alcove The second shaft (No. 42) was sunk 260 feet from the Triple Gate, in a line at right angles to the east jamb of the centre arch of the Triple Gateway. The rock was reached at a level about 2,300, and the shaft is close to the inside of the Ophel wall. A gallery driven west along the rock struck the same ancient drain found in the former shaft, and a branch from the north-west was also found. After running 30 feet from the shaft, the gallery struck on a massive wall running north in the direction of the east jamb of the centre arch of the Triple Gate. This wall was followed southwards 31 feet, where it ceases, and 35 feet to the north, where it is succeeded by a wall of rubble, on the top of which, not apparently *in situ*, was a

well-cut drafted stone 2 feet high by $3\frac{1}{2}$ feet long. The rubble wall continues 10 feet further north Further examination showed a large stone 3 feet high by 15 feet in length, used in this wall, and cut stones appear to have stood on the rubble A shaft was found immediately east of the wall, which (as shown on the Plan) led to the rock-cut chamber which is under the wall The level of the surface at this point is 2,349, and the rock is 29 feet lower (or 2,420). The shaft is $4\frac{1}{2}$ feet deep, and passes down into the roof of the chamber

There was nothing to indicate the age of the walls thus found, which may perhaps have been built to retain a ramp running up towards the Triple Gate Further excavations were undertaken (Nos 38 and 40) just south of the path leading east and west at the corner of the modern city wall. In the latter, rock was found at $27\frac{1}{2}$ feet, with rock-cut cisterns and a passage leading to them with steps east of the shaft A gallery was driven north and reached another cistern, 17 feet square, and was continued for 60 feet The rock was found to have a scarp facing east In the other shaft rock was found at 12 feet (2,303) with a scarp facing west, and 12 feet to 14 feet high for 15 feet north-west and south-east The chief result of these shafts was the determination of the rock, and of the fact that this part of the hill had once been covered with buildings The drain discovered may be connected with the rock-cut channels which come from inside the Sanctuary under the Triple Gate.

The cavern above mentioned was fully explored It consists of two chambers cut in the rock with flat rock roofs. The northern chamber is about 12 feet square, and on the east side a masonry wall closes it The southern chamber is of irregular shape: three rock piers divide it, and run in a line north-east and south-west. The portion east of the piers, which may have formed some kind of porch, is confined by masonry walls on the east and south It is in the roof of this portion that the rock shaft (noticed above as found in gallery No. 42), occurs The larger part of the chamber, west of the piers, is of rock, except on the east (south of the piers), where a masonry wall occurs The shape is best seen on the plan. There are two troughs cut in rock against the wall, as shown, $1\frac{1}{2}$ feet wide and 6 inches deep In one a plug-hole was found, as though the trough were a vat for the reception of a liquid. Eyes are cut in the roof, on the walls, and at intervals below the troughs, two grooves in the rock

being connected by a hole pierced horizontally. These holes are about 1 inch behind the rock surface, and a rope 1½ inches in diameter might be passed through them, the holes are about 2 inches long. The present floor is about 2 feet below the level of the troughs, but the rock floor is 11 feet below the same level. This seems to preclude the possibility that the troughs were originally intended for mangers, if the floor were on the rock

The modern dyers' shops in Jerusalem contain somewhat similar troughs or vats, and staples in the walls for the lines on which the dyed cloths are hung to dry The vats are, however, circular, and not as in the cavern, long and narrow. The earth in the cavern was turned over and many fragments of pottery were found, as well as the base of a copper candlestick, which appears to be of the Byzantine period. Above the shaft in the roof of the cave is a drain, in which fragments of glass and pottery of the early Christian period were also found.

Tradition points to this quarter of Jerusalem in connection with the trade of fulling. Thus En Rogel (probably the Virgin's Fountain) is generally translated 'The Fuller's Spring,' and St. James is said by the early traditions to have been thrown from the Sanctuary wall and slain by a fuller's mace. On the other hand, the troughs are not unlike the rock-cut mangers which occur in caves in Southern Judea (possibly also at Bethlehem), and at Arâk el Emîr, east of Jordan, as well as at Dustrey, near Athlit Such mangers seem to have been used in the Middle Ages, in early Christian times, and also in the Jewish ages before the destruction of Jerusalem. The cave may therefore have been either a fuller's shop or a stable, but in the latter case a considerable accumulation of earth must have existed above the rock where the troughs were cut.

C R C

EXCAVATIONS IN THE CITY, 1867—1869

The excavations within the city include those in the Muristan; the shaft at the so-called Gennath Gate, those outside the Damascus Gate, and the shaft in the street called el Wâd. The results in the Muristan were mainly negative, and are noted in the full account of the Muristan given on a later page.

Gennath Gate (so-called)

The spot to which this name is traditionally applied is at the corner where the street called Hâret ed Dawayeh turns sharp north and descends into David Street. A few voussoirs of a semicircular arch of squared stones were here visible in the wall facing west. A donation was made by H. R. H. the Archduke of Modena for excavations at this spot. A shaft was sunk beside the north jamb in February, 1869, and the arch found to be well preserved beneath the surface, though much weathered above. The rise is 5 feet 4 inches, the diameter 10 feet 8 inches. The haunch rests on a capital, the profile of which was measured, it is 2 feet high. The jamb consists of three courses below this capital, having a total height of 7 feet 4 inches for the three courses. A flat sill projects 12 inches beyond the jamb at the bottom, but no pavement was found. The arch consists of eleven voussoirs, each 2 feet 3 inches deep, by the same measure at the extrados; the keystone projects 3 inches below the soffit of the rest of the arch—unless this be due to settlement in the crown. A pointed archway of late date was found to be built within the older gate. The groundsill is nearly on the level of the present

surface of David Street The shaft was sunk below the sill, and this gateway was found to rest on earth mixed with pottery The rock was struck at a level 2,449, the level of the sill being 2,474½, and that of the present surface 2,486. No signs of any ancient wall were found at the bottom of the shaft.

The gateway has probably no connection with the true Gennath Gate. It appears to be Roman or Byzantine in origin, perhaps the west door of a church or public building. The level of the sill enables us to measure the rate of growth of the rubbish in Jerusalem at this point, which has amounted to only 10 feet in about fourteen centuries On the other hand the level of the modern streets is in parts known to have been raised more than 6 inches in about ten years when the town was repaved.

Damascus Gate.

An excavation was commenced in August, 1867, outside this gate and east of the road, where a great heap of rubbish now occurs. A solid wall was found outside the present city wall, and north of this a flight of steps probably leading into a tank North again of the steps an ancient wall was found running east and west, consisting of large drafted stones like those of the Sanctuary, but apparently not *in situ*. The wall stops nearly opposite the present gate, and was here found to be 10½ feet thick, the north side being of different masonry to the south, but judged to be of the same age. The foundations of this wall are 3 feet lower than the present roadway at the Damascus Gate, and the greater part of the wall is above the present general level, but concealed by the heap of rubbish. The conclusion reached by Sir C. Warren was that the wall in question was built by the Crusaders with ancient material, and this agrees with the fact that traces of the foundations of the Crusading north wall of Jerusalem are visible further west at the edge of the fosse outside the modern city wall A stone was found in the rubbish at the foot of the wall, on which a Templar's cross was cut. It had once formed part of the wall. The core of the wall was traced west of the present roadway under the rubbish heap, which exists on this side of the modern Damascus gate. This gate in the twelfth century was called St. Stephen's Gate. The Third Wall, built by Agrippa, is generally supposed to have passed

above the Cotton Grotto rather further east, and from that ancient rampart the large stones in the Crusading wall were probably taken

The Street called El Wâd.

A shaft was commenced on the 19th May, 1869, close to the corner of this street, where the Via Dolorosa joins it immediately south of the Austrian Hospice (at the point marked 27 on the Ordnance Survey) The level of the surface is here 2,418 The shaft on the west side of the street passed through black soil and large rough stones until, at a depth of 17½ feet (2,400), the rock was found to shelve down at about 45° in a west-south-west direction in steps 2½ feet high. A gallery was driven west through hard soil and large stones, and after 5½ feet the old sewer from the Damascus Gate was found, which is 2 feet wide and 4 feet 9 inches high; the floor is of rock, falling about one in six to the south, the roof is of flat stones laid across this was examined for 130 feet southwards, and three shafts leading down into it were explored. The gallery was continued beyond this sewer, and at 17 feet it reached a shaft with a drain above reaching 7 feet higher. The shaft was cleared and rock discovered at 15 feet below the gallery (2,378). The shaft was 4 feet square of masonry. The rock was scarped on the east and south.

The principal result of these excavations was the determination of the rock in an important locality. The existence of a scarp facing south further east, near the Ecce Homo Arch, and of another scarp facing east in the street called Tarik Bâb el 'Amûd, north of the Damascus Hotel, together with the lie of the rock in the gallery above mentioned, seem to point to a rocky counterscarp in this part of Jerusalem, which might prove to have been that of the ditch outside the famous 'Second Wall'

C R C

EXPLORATIONS SINCE 1869 A D

THE HARAM ENCLOSURE

Birket Isrâîl

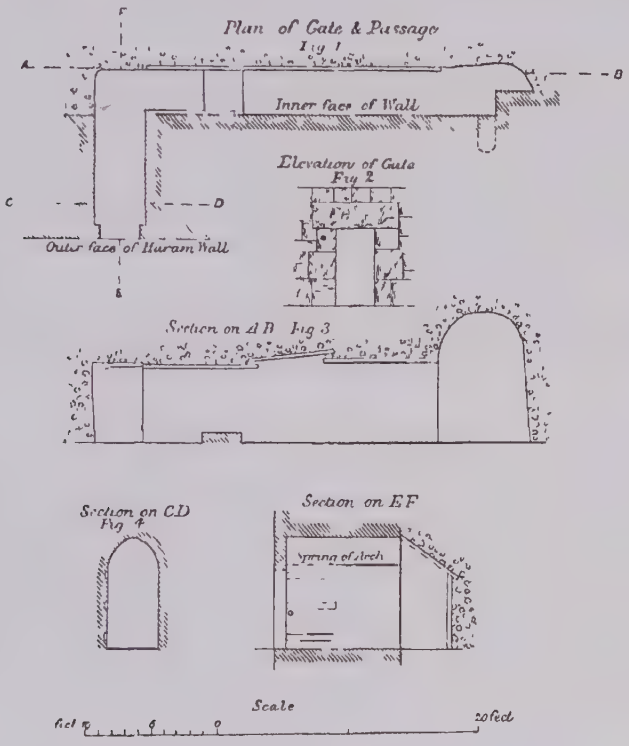
It is worthy of notice that the masonry of the pool is similar to masonry found in Byzantine ruins in various parts of Palestine, not only because of the size and square proportions of the stones, but also because the wide joints are packed with small cubes of stone The stones were rudely scored over to make the cement adhere better. Where the casing has fallen away a second thickness of similar masonry is seen behind This seems to render it improbable that any wall like those on the other three sides of the Haram here exists, for such a wall would hardly have been faced with a double casing of such inferior masonry. This conjecture agrees also with the fact that no corner or straight joint was found in Colonel Warren's excavations in the eastern face of the east wall, which runs north beyond the present north-east angle of the Sanctuary. We have as yet no conclusive evidence of the line of the ancient north wall of the Temple Enclosure.

East Wall

A gateway in the more modern masonry was opened in this wall in 1882, and an attempt at excavation made within the wall by the Turks. The wall at the level of the present surface was found to be 9 feet 6 inches thick The following is Lieutenant Mantell's account of the gateway.

'The thickness of the wall is 9 feet 6 inches, and through it a passage is built 3 feet 9½ inches in width The height is 6 feet 7 inches to the spring of the arch, which is formed of seven voussoirs in all, the key-stone being smaller than the side voussoirs The height in the centre is 8 feet 6 inches, so that the rise of the arch is just half the span It is, however, not semicircular, but slightly pointed

'At the eastern face arrangements have been made for a door The three horizontal grooves are presumably intended to leave space for the bolts in opening and shutting the



door—an arrangement sometimes followed at the present time On each side also is seen a hole for hinges or bolts, one being represented in the figure below the central horizontal groove

'The opening on the east is narrower than the passage itself (being 6 feet 1 inch high by 3 feet broad), and is surmounted by a lintel stone 6 feet 6 inches by 2 feet by 10 inches thick The size and arrangement of the adjacent stones are shown according to actual measurements

'The left (southern) jamb of the door is 257 feet from the south-east corner of the Haram

'With the exception of the lowest course, the masonry within the gate and on the inner surface of the wall consists of well-cut undrafted stones, 1 foot to 2 feet 6 inches in length, in courses from 1 foot to 2 feet in height The materials of the lowest course, however, are evidently more ancient, the stones are much larger (the dimensions of two of them being 4 feet 6 inches by 3 feet 8 inches, and 4 feet 9 inches by 3 feet respectively), and show signs of a marginal draft with a much worn rustic boss One side of the passage is partly covered with good white mortar, with tool marks on the surface resembling arrow-heads, intended either to be ornamental or for the reception of another layer of plaster.

'After reaching the inner face of the wall, the excavators ran a gallery northwards under the surface of the Haram for a distance of 29 feet The earth through which it runs consists of stones (some 6 inches to 1 foot across) and rubbish, and is supported by woodwork, one side of the gallery being formed by the wall itself It is here that the interior course of more ancient material referred to above has been laid bare. One stone projects from the floor of the gallery, but the rest of the floor is apparently earth At the north end the ground plan of the wall is as represented. The dotted line at this point shows a closed up drain, or the vacant space left by removing one of the lowest stones in the wall.

'The work has now been left some months, I believe, *in statu quo*, and the Turks do not at present show any intention of continuing their investigations further

'A M M'

'This door is probably not older than the fifteenth century at earliest The masonry of the Haram above the door and north of it became much dilapidated in 1881

'C R C'

Measurements of the Haram

The Tyropœon Bridge.—The existing arch is 50 feet broad, and measures 38 feet 9 inches from the south-west corner of the Haram The accord between this and the dimensions of the Royal Cloister of Herod's Temple is striking. As regards the diameter of the pillars of the Royal Cloister, they may, no doubt, be assumed at about 6 feet, which is about the diameter of the existing monolith at the Double Gate The measurements of the Cloister will then be

Josephus's Measurement

Wall (thickness)	8 feet	} 38 feet	
South Walk of Cloister . .	30 feet		
Pillar (diameter)	6 feet	} 52 feet	
Central Cloister	45 feet		
Pillar (diameter)	6 feet		
Total ..	90 feet.		

Actual Measurement.

From south-west angle to south side of Bridge		38 feet 9 inches.
Breadth of Bridge	...	50 feet
Total	...	88 feet 9 inches

This is as near as we can go without actually knowing the diameter of the pillars, which could hardly be spanned by three men (Ant xv. 11, 5) If we reduce the diameter to 5 feet 6 inches, the result will agree with actual measurement within 3 inches

Length and Width of El Aksa—The measurements are given in an Arab MS of the fifteenth century of the Masjid el Aksa, which, as is well known, was the old Arab name for the whole enclosure now called Haram esh Sherîf The Arab writer gives the breadth along the north wall as 455 *dhr'a*, which is just the length of the north wall of the Haram, 1,042 feet. The length, 784 *dhr'a*, which he gives, is equally close to the length of the west Haram wall, 1,601 feet The *dhr'a* is the Turkish *pic*, or 2 feet 3 inches

The measurements of the Masjid given in the same century by Mejr ed Din (Hist. Jerusalem, Chapter xx) are equally exact He makes the length of the east wall from Bab el Asbât to the Mihrab Dâûd (south-east corner) to be 669 common architectural *dhr'a*, which agrees with the length of the present east wall, 1,530 feet The width he gives is a mean measure from the outside of the wall at the Bâb er Rahmeh (Golden Gate) to the opposite cloisters. This he states at 406 *dhr'a*, agreeing very closely with the actual measurement of 970 feet

Mejr ed Din adds, 'Should any one else find it one or two *dhr'a* more or less, it must be put down to the difficulty of measuring I measured it twice myself before I obtained the true measure' (Chapter XX, Section 20)

Mejr ed Din also gives the size of the Jami'a el Aksa, or mosque, on the south Haram wall He makes it 100 *dhr'a* long by 77 *dhr'a* wide. The measurements are exact, without including the porch outside on the north.

These measurements are of value as showing that the area of the

Haram was the same in the fifteenth century as it now is, and that Mejr ed Dîn, who took the mean width, was aware that the area was not rectangular

Two standard examples of the small and medium *ameh* are said in the Mishna (Kelim xvii. 9) to have been preserved at the Gate Shushan, which was due east of the Holy House This gate has not yet been rediscovered When it is, let us hope the standard measures will also be found.

The Jews had at least three measures called *ameh*, or cubit The smallest, of five handbreadths, measured the vessels of the Temple, the medium, of six handbreadths, measured its buildings (Tal. Jer Menakhoth 97 *a*) The medium cubit consisted of two spans (*sit*)

It must not be forgotten, in dealing with this matter, that the Jews are not a tall people, and that their hands were probably as delicate as those of the present Jews and Arabs We may therefore take the measures of an English gentleman's hand as not being less than those of a Jewish hand.

Taking, therefore, the cubit of forty-eight barleycorns (Maimonides, Sepher Torah, ix 9), and the barleycorn as equal to our English long measure barleycorn—as results from actual measurements of barleycorns in Syria made in 1872—we obtain 16 inches for the medium cubit, and the span is consequently 8 inches, which is about the extreme distance which can be stretched from the thumb to the small finger of an ordinary hand. A hand spanning 9 inches is a large one

The *zereth*, rendered 'handbreadth,' will in this case be 5 33 inches, which is the ordinary span of the four fingers. As to the smaller divisions, there is great difficulty in ascertaining how the measurements are to be made, and the determination of the larger ones, *sit* and *zereth*, is of course more conclusive in the matter. As regards verification from monumental remains, I have pointed out that in the Synagogue of Umm el 'Amed the pillars are 10 cubits high, with bases of 1 cubit and capitals of half a cubit, the cubit being taken as 16 inches

The proposed determination of the levels of the Temple Courts from the same hypothesis has also been explained in 'Tent Work in Palestine' (Vol. I., p. 359).

In the Haram itself there are several other similar indications. Thus,

at the north-west corner of the area, the chamber which I explored in 1873 shows piers projecting from the wall at an interval of 8 feet 9 inches, with a face of 4 feet 9 inches, giving a total of 13 feet 6 inches as the distance from centre to centre of the piers. Ten cubits of 16 inches is equal to 13 feet 4 inches, giving an interval of 10 cubits for the piers from centre to centre, while the piers are $3\frac{1}{2}$ cubits broad.

The average height of a course of masonry in the Haram wall is 3 feet 4 inches, or $2\frac{1}{2}$ cubits of 16 inches. The lintel of the Single Gate is 82 inches high, which is within 2 inches of 5 cubits. The master-course on the south wall is 6 feet in height, or $4\frac{1}{2}$ cubits of the 16-inch dimensions. The wall at Jerusalem (and at Hebron) is 8 feet, or 6 cubits, thick above the level of the interior. The Hebron buttresses are 8 cubits from centre to centre. Three consecutive stones in the second course of the east wall, as measured by Colonel Warren, are respectively 7 cubits, $3\frac{1}{2}$ cubits, and $4\frac{1}{2}$ cubits in length. Colonel Warren has remarked that the dimensions of the Haram masonry are generally multiples of the English foot. The explanation is perhaps to be found in the relation of 4 to 3 between the foot and the cubit.

It may be that this accumulation of coincidental indications is not conclusive, but at least no such evidence has been collected in favour of a longer dimension for the cubit.

The *amch* was the length of the fore-arm to the first joint of the fingers. It requires a long arm to make this equal to 18 inches.

Note as to the Haram Masonry

The masonry above the surface was carefully examined by the Duc de Vogué in 1862, and is described in his great work on the 'Temple of Jerusalem' (pp. 4-7). He considers the drafted ashlar to belong to the time of Herod, and the good square masonry above it to be of the Byzantine period (probably of the time of Justinian), the latter is found chiefly on the south-west and west. Both these kinds of masonry and the later Arab work above are described in detail in the Ordnance Survey Notes, pp. 23-28. The early undrafted Byzantine masonry almost equals the drafted in the dimensions of the stones.

The dressing of the drafts in the ancient masonry is quite unlike that

found in any other buildings yet examined throughout Palestine, with exception of the Hebron Haram, the stones of which, in size and finish, exactly resemble the finished work at Jerusalem The adze of 8 teeth to the inch was carefully used in a vertical direction, such an instrument is still used by native masons, but it is much coarser, and is more carelessly used than in the Haram ashlar. Drafted masonry of the Byzantine and of the Crusading period is common in all parts of Syria, but the Byzantines used a chisel giving a rough finish only, and the Crusaders used a fine chisel, generally in a diagonal direction The Crusading drafted stones have, moreover (as, for instance, at Kulât el Hosn, north-east of Tripoli) in some cases masons marks on the face of the stone The dressing of the Baalbek drafted masonry (Roman work of the second century, A D) is also quite different from that of the Jerusalem and Hebron Harams. The drafted stones east of the Holy Sepulchre Church, and those in the scarp of the so-called Tower of David and at the Zion scarp, are quite differently dressed along the drafts from the Haram masonry.

The fine adze dressing also occurs on the remaining voussoirs of the Tyropœon Bridge—an indication of some importance—and Sir C Warren describes the same dressing on the stones at the base of the great walls It would appear, therefore, not improbable that all the finished drafted masonry in the Sanctuary walls belongs to the same date with the Tyropœon Bridge

Sir C. Warren is disposed to give different dates for different parts of the ancient Sanctuary wall, for two principal reasons First, because of the distinct style of the masonry north of the Golden Gate, west of the Double Gate, and on the west wall south of the Prophet's Gate, where the stones have rustic bosses with great projection. Secondly, because the master-course, which ran from the Double Gate to the south-east angle, is not found west of the Double Gate With regard to these two arguments it may, however, perhaps be useful to remember, first, that in the three places where the rustic work occurs a valley intersects the east, the west, and the south walls of the Sanctuary respectively. It may be suggested that the ground was filled in in these valleys, both inside and outside the Sanctuary, above the level of the rough masonry, at the time of the construction of the walls, and that the pavement at this level at the

Prophet's Gate and south-west angle belongs to the time of the building of the wall. In this case the rough-faced stones would have been left unfinished because they were never intended to be seen, and the drafts only cut to insure the fitting of the joints, which is so close that a knife can hardly be inserted between the stones. It would not on such a theory be necessary to suppose that the rougher masonry is of different date to the smooth, but the masonry must in this case be later than the original Tyropœon Bridge. Secondly, as regards the master-course, it may be remarked that this band of stone is not continued northwards along the east wall, any more than westwards from the Double Gate. It is replaced on the east by two ordinary courses; but the east wall (towards its south end) is supposed by Sir C. Warren to be of the same date with the south wall for two-thirds at least of its length towards the east. The argument drawn from the absence of the master-course would affect the east wall as well as the western part of the south wall and the southern part of the west wall, remembering, however, the many irregularities of material, finish, and angular measurement in the Sanctuary walls, it does not perhaps seem possible to draw a very definite conclusion from the extent of the Great Course.

No conclusion as to the date of the wall can be drawn from the characters painted on the stones of the bottom courses. We are without any monumental inscription of the time of Solomon with which to compare them. The letters have been pronounced Phœnician by the late Mr. Deutch, but their forms are too rude to give any clear indication of their age. They may have been painted by Herod's masons quite as well as by Solomon's.

The stones at the base of the wall at the south-east angle have the face within the draft dressed, but the drafts are very irregular. It may, perhaps, be suggested that these are *spoilt stones*, which either through a failure of material, or through the stupidity of the mason, were so cut as to be unfit for their original destination in the part of the wall which was visible. For these reasons they were marked for the foundation and placed in the lowest courses, which Sir C. Warren has shown never to have been seen after the wall was finished. This view would agree with the supposition that the stones were faced in the quarry, and not after being placed in the wall.

Josephus tells us that the area of the Temple Enclosure was increased by various builders since Solomon (5 Wars, v. 1), and that Herod rebuilt the cloisters from their foundations (1 Wars, xxi 1) The intersection of the ancient aqueduct, on the south-west, by the wall, together with the above historical statement, with the dressing of the Tyropœon voussoirs, and with the similarity of finish in the foundations and in the highest drafted courses, all seem to point in one direction namely, to the late date of the Haram walls as at present existing, and to the drafted masonry being—as contended by De Vogué—the work of Herod the Great.

On these considerations the following suggestions of date are founded, which may perhaps be considered worthy of notice

1 The foundations of the Ophel wall were the work of Nehemiah in 457 B C

2 The single voussoir of the Tyropœon Bridge, found in the rock-cut aqueduct beneath the pavement supporting the other fallen voussoirs, belonged to the bridge destroyed at the time of Pompey's siege in 63 B.C (14 Ant iv. 2, 1 Wars vii. 2).

3 The Tyropœon Bridge was rebuilt by Herod the Great, 19 B C, and the lowest pavement laid

4 The drafted masonry of the Haram walls, which has the same dressing with the voussoirs of this second bridge, belongs to the same period

5. The somewhat different masonry of the east wall north of the Golden Gate, together with the great stones lying north of the modern city (see Part II, el Heidhemiyeh), belong to the wall of Agrippa, 41 A D

6 The undrafted Roman masonry, the later work of the Double and Triple Gates, the vaults of their tunnels, the vaulting of Solomon's Stables, of the Prophet's Gate, of Wilson's Arch, and of several of the tanks, including the Twin Pools, belong, together with the Golden Gate, to the time of Justinian's restorations in 532 A.D.

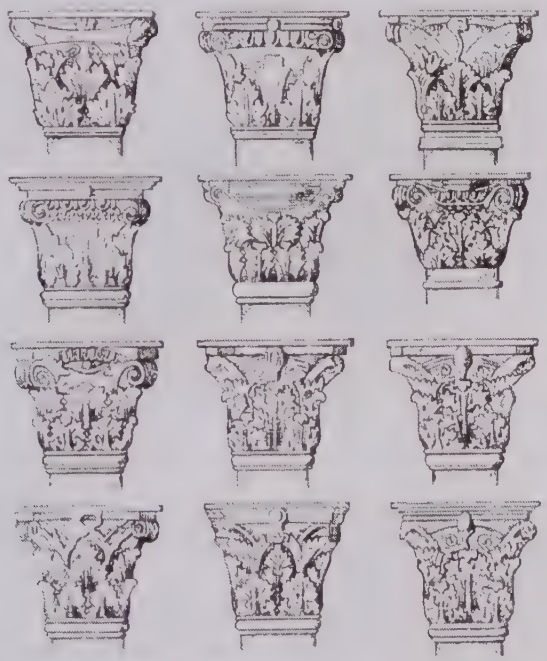
Byzantine Work in the Haram

The vaulting and piers of the passage from the Double Gate, the Double Tunnel from the Triple Gate, and the so-called Solomon's Stables, are generally acknowledged to be of Byzantine origin These vaults have all the same peculiarity of a very narrow keystone with

voussoirs gradually increasing in width towards the haunches. The same peculiarity is observable in the vaulting of the passage from the Prophet's Gate, and in the masonry vaults covering cisterns I. and III. (of the Ordnance Survey), as well as in the older part of the vaulting over the Twin Pools. It is probable, therefore, that the passage from Barclay's (or the Prophet's) Gate was roofed in in the sixth century, the older roof of the passage having fallen in, unless the entrance consisted only of an open passage without any roof.

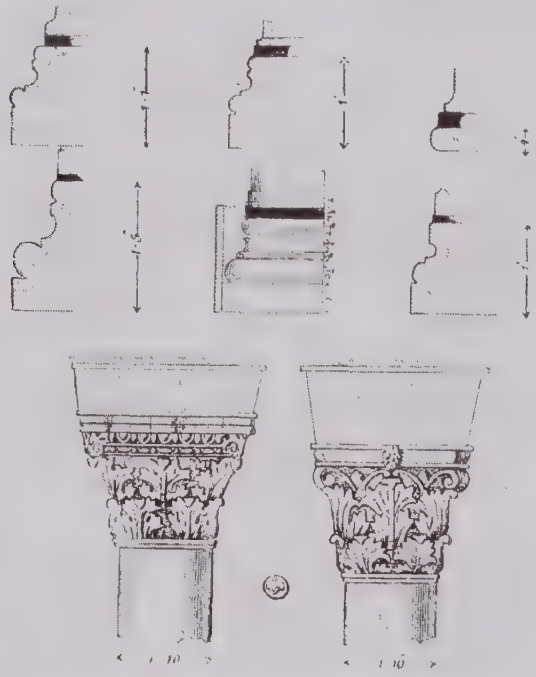
Dome of the Rock.

Restorations were commenced in 1873 by order of the Sultan 'Abd el 'Aziz, and during their execution several interesting discoveries were made.



The Haram was frequently visited at this time by MM. Clermont Ganneau and Le Comte, by Lieutenant Conder, and by Mr. Tyrwhitt Drake.

Herr Schick was also connected with the work as an adviser of the native architects. Within the Dome of the Rock the marble casing of the blocks above the pillars and surrounding the bases was removed and the original bases laid bare. They proved to be different from each other, and the shafts were found to rest on a bedding of lead above the base. The capitals were all sketched by Lieutenant Conder in 1872, with a view of showing the great differences existing between them. It appears that



the columns were taken from some earlier building or buildings, very possibly from the Holy Sepulchre Basilica of Constantine, for the purpose of supporting the present Dome.

During the time when the scaffolding was erected within the Dome, Lieutenant Conder ascended into the drum and was able to observe the glass mosaic. It is remarkable that the gilded *tesserae* are fitted in at an angle so as to reflect the light downwards. The *tesserae* of other colours

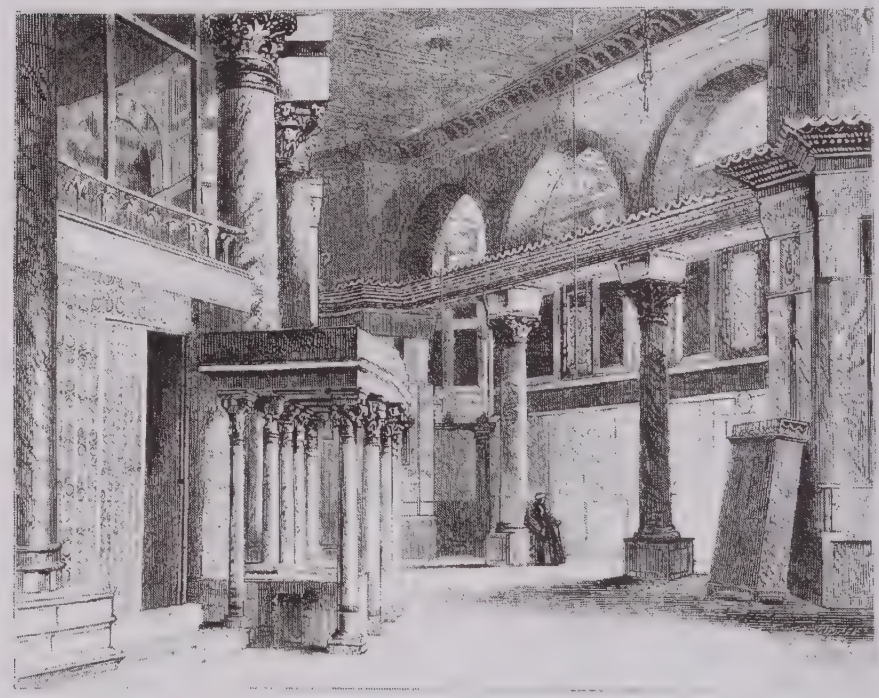
are not so arranged, but are placed flat in the wall. This arrangement appears first to have been noticed by Herr K. Schick.

The removal of the Kishani tiles from the exterior of the octagon wall laid bare the arcades of the balustrade above the roof. This was examined by all the officers of the Society. The dressing of the stones has been injured by their preparation to receive the tiles, but both in proportion and dressing they appear to bear no resemblance to Crusading masonry. Beams were found resting on this wall above the modern ceiling, forming part of an older roof, with an inscription dating from 913 A.D. A well-carved wooden cornice, hidden by the modern ceiling,

appears to have supported the older roof. The date thus obtained, together with the dates above the gates in this wall (216 A.H., or 831 A.D.), appear to agree in pointing to the erection of the octagonal wall in the ninth century. The arcades are not mentioned before the twelfth century, but the round arches and the pairs of dwarf pilasters, standing above the larger panels, having also round arches, give to the octagon wall a general style approaching to that of Sassanian buildings. The building at 'Ammán, which has been considered by architectural authorities to be not later than the eleventh century, bears a striking resemblance to the octagon wall of the Dome of the Rock. The pointed arch is said to have been first used by the Arabs in the ninth century.

and the general result of these various indications seems to tend to the supposition that the octagon wall of the Dome of the Rock was erected in the ninth century. (See Dr. Chaplin's Letter, 'Quarterly Statement,' 1873, p. 155.)

Some eight rafters in all were laid bare above this wall in 1873. The inscription was in Cufic, and was thus rendered by Professor



Palmer: 'In the name of God, grace from God to the servant of God, Jafer el Muktader Billah, Commander of the Faithful, may God spare him to us. According to the order of Essaiyedeh (may God aid her), and it was performed at the hands of Lebid, a Freedman of Essaiyideh, and that was in one and . . .'

The date was illegible, but Professor Palmer points out that the Mosques of the Empire were repaired by 'Aly Ibn Isa, vizier of El

Muktader, in the year of the Hegirah 301 (913 A.D.), which is evidently the date of this text.

The carved wooden cornice was found between the modern ceiling and the roof. The ceiling dates from 1190 A.H., or 1776 A.D. The cornice was evidently once visible.

The Platform Pavement

A good many masons' marks were observed on the flagstones of the platform round the Dome of the Rock. They were copied by Captain Conder and Mr. Tyrwhitt Drake.

A few of these are marks commonly found on Crusading buildings, but others are peculiar to this pavement, and not found in other buildings in Palestine. Several of the marks approach closely to those found on the walls of the palace of Saadi-talat, near Ispahan. It is doubtful whether the pavement should be referred to the early Arab period or to the Crusaders. Masons' marks (with one doubtful exception) do not appear to occur on the octagon wall of the Dome of the Rock, where they have been sought carefully by Lieutenant Conder and others.

The Aksa

The original basilica of Justinian, as restored by De Vogué, consisted of a nave and four aisles, the total length north and south being 250 feet, and the total breadth 150 feet. Several of the original pillars remain in position, with Byzantine capitals, of which drawings are given by Du Vogué ('Temple de Jerusalem,' Plate XXXII.).

In 1871 the plaster which covered the capitals flanking the Mihrab in the so-called Makâm 'Ami, immediately adjoining the Aksa Mosque on the east, was removed, and the capitals proved to be elaborately carved specimens of Gothic work representing symbolical animals with arabesques. These were drawn by Rev. J. Neil, and afterwards by Captain Conder

There are several other fragments of Crusading work in the Haram, including the twisted pillars in the wall on the south-west side of the platform, the three small altars within the Dome of the Rock, and the capitals, with small angels' heads between the volutes, which flank the Mihrab in the latter building

Dome of the Chain.

The capitals in this small building (which is said to have been the original model of the Dome of the Rock) are very various, but all of much later style than those of the great pillars in the Dome of the Rock. They may possibly have been carved for their present purpose, and though elaborate specimens of tracery in stone, they are of debased style Some of them closely resemble in character the tracery in St. Sophia, at Constantinople

THE CITY

Explorations within modern Jerusalem are rendered almost impossible by the fact that the foundations of the modern houses are laid not on the rock but on rubbish, so that even an unusually rainy winter is sufficient to cause many buildings to collapse, as was notably the case in 1873-4 There are, however, certain antiquities within the walls, which require special notice, which have been further explored since 1869

Constantine's Basilica

The remains of the Propylea were recognised by Willis east of the Church of the Holy Sepulchre, and close to the Via Dolorosa In a vault west of this street four grey granite shafts may still be seen, they were discovered by Schultz They are ·6 metres in diameter, and 2 5 metres apart On the south at the end of this colonnade is a pier, 8 metres on its north face, with a semi-pillar on the north side, 75 metres in diameter and projecting 3 metres. This pilaster is about 18 metres south of the axis of the present Rotunda of the Holy Sepulchre Church, and 54 metres east of the east end of the present church

The remains of an ancient wall, having a corner to the south-east, run

parallel to this colonnade, about 15 feet west of it The south face of this wall runs east and west, a little south of the pier above-mentioned The relation of this wall to the granite columns has not been determined, but it seems possible that the pillars formed a porch, and that the wall had gates entering into the Atrium, which is supposed by De Vogué and Willis to have existed west of this colonnade The wall was supposed by Canon Williams and by De Vogué to be the remains of the ancient Second Wall of Jerusalem This wall was examined in 1864 by Captain Wilson (See Excavation No 6, 'Ordnance Survey Notes,' p 74)

The following is his account

'Three openings were made, first by the side of the massive masonry said to be part of the Second Wall, where the rock was reached at a depth of 7 feet 4 inches below the pavement of large flat stones, and nothing found but loose earth and rubbish The lower part of the masonry was of large stones, without the marginal draft, the bottom course was pinned up on the rock with smaller ones; mortar of a bad quality, crumbling directly it was touched, was used in building. The portion of wall running in a north and south direction consists of a single line of large stones, with marginal drafts, faced interiorly with stones having plain chiselled faces, and against this a wall running east and west abuts with a straight joint Many pieces of broken marble casing and a fine white marble font or basin were found by the Russians in another part of the ground. The second opening was made under the gateway (south of the wall), to clear the two sides and examine its construction, on one side the arch rested on a hand some Corinthian capital, whilst on the other it was supported by a column, on the top of which was an unfinished capital, or block of stone, roughly hewn into shape On the column a large cross was cut in relief, and beneath the arch in the doorway itself later masonry was found, something like a small oven The third excavation was made at the foot of one of the granite columns, at the north end of the Bazaar, the column is set on a pedestal of the limestone of the neighbourhood, but the rubbish could not be cleared all round it'

Two photographs were taken, and a plan made showing the relative position of the buildings (Plate XX, Fig 8, Ordnance Survey) These remains were subsequently visited and described by Lieutenant Conder in 1872

The gateway where the second excavation was made is a distinct structure south of the wall and columns It has been drawn by De Vogué ('Temple de Jerusalem,' p 120), and is evidently a Byzantine reconstruction with older materials The arch is about 8 feet in diameter, semicircular, with 9 voussoirs, and facing east on an axis parallel to that of the granite colonnade The wall continues north of the arch about 8 feet, terminating in a pilaster with a capital level with the crown of the arch This capital, like that under the north haunch of the arch, is also Corinthian, but is much damaged There are six courses of stones in this wall, the whole being of good ashlar, not drafted, and resembling the Byzantine work in the Haram. The capitals are about 2 feet 4 inches high and 32 inches broad at the top; the stones in the wall are about $2\frac{1}{2}$ feet high. The general appearance of the arch and wall is that of the southern half of a triple portico, but there can be no question that it is a reconstruction, for the courses composing the northern pilaster are jointed in a very awkward manner into the rest of the wall, the horizontal joints of the masonry being at different levels

The wall of drafted masonry north of this archway is very superior in character It is visible on the north side of a courtyard containing the archway The part running east and west consists of three courses, and presents a buttress facing south, 5 feet broad, and forming the original south-east angle of the building, the continuation of the wall eastwards having no bond. This buttress resembles those described in the Haram, and consists of drafted stones, the largest measuring 5 feet by $3\frac{1}{2}$ feet in height, the face being smooth on the boss. The projection of the buttress is also, as in the Haram, due to the bevelled set-back of the wall west of it. A careful examination of this drafted work showed, however, that the dressing, though careful, was entirely different from that of the Haram masonry

The wall running north from the buttress is $3\frac{1}{2}$ feet thick, the stones about $2\frac{1}{2}$ feet to 2 feet high and $3\frac{1}{2}$ feet long The bevelled set-back in the south wall consists also of drafted stones, but above it is smaller undrafted masonry, on one stone of which a cross and a cross *croisé* are cut, apparently *graffiti* of pilgrims The general impression which resulted from this examination was that the corner in question was probably early Christian work, in imitation of the Haram masonry, and that the buttress

marks the south-east angle of the Atrium of Constantine's Basilica, the pillars to the east being remains of the Propylea in front of the Atrium doorways

The Muristan

('Quarterly Statement,' 1872, p 100; 1873, p 19, 1875, p 77)

In the centre of modern Jerusalem is an area about 150 yards square south of the Holy Sepulchre Church The eastern half of this area was given to the German Government by the Sultan in 1869, and the Emperor ordered this part of the area to be cleared out. The western half is still covered with *débris* to a depth of some 20 feet, and before the excavations commenced the greater part of the area was occupied by a ploughed field, beneath which the massive piers and walls were found The chapel and hospital of the Knights of St John still remain to be excavated under the *débris* on the west; the Church of St Mary the Great, and the abbey attached to it on the south, occupy the eastern part of the area. The whole enclosure, now known as the Muristân, or 'hospital for the insane,' is bounded by David Street on the south, by the Street of Palmers on the north, by Christian Street on the west, and by the bazaars—the mediæval Malcuisinat—on the east A fine arcade of groined vaults and pointed arches, resting on massive piers of drafted masonry with rustic bosses, forms the boundary of the enclosure on the south, opening on David Street The Byzantine Church of St John the Forerunner stands at the south-west angle at the corner of David Street and Christian Street The mosque and minaret of 'Amr at the north-west angle possibly occupies the site of the chapel of the Hospital, which appears to have been very near the Church of the Holy Sepulchre St Mary the Great occupies the north-east angle, and was built about 1130 A D. It is remarkable for the fine double north doorway, a Gothic structure with a round arch, having representations of the twelve months, with their names. These are carefully reproduced by De Vogué ('Eglises de la Terre Sainte,' Plate XVIII, p 260) The windows and south door of the church have also round arches with a curious chess-pattern ornamentation The foundations of the piers of the nave were found when the church was cleared in 1872, and the floor proved to be of marble mosaic, part of which remains still in place The masonry of the walls is very finely cut, and presents

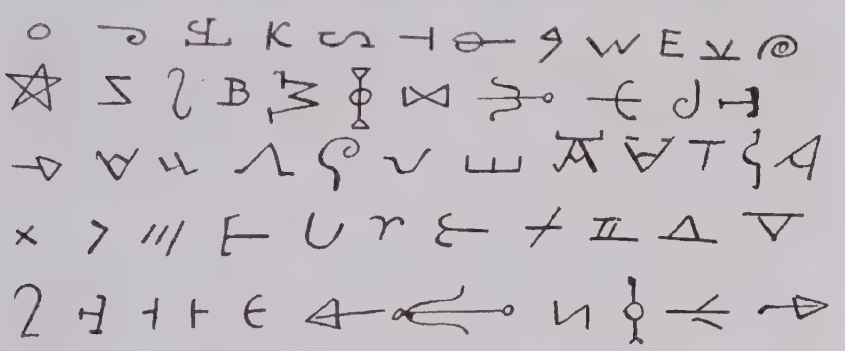
many examples of the mediæval diagonal dressing and masons' marks, the lines of the dressing are, however, often vertical or horizontal. The church consisted of a nave and two aisles, of four bays with three apses The south wall of the church has been thickened on the south side at a later date than that of the Crusading work, and a little stairway leading to an Arab doorway runs up this wall to the level of the upper story of the southern cloisters Under the south wall was found a grave containing bones and remains of Crusading date, one of the skulls had a deep sword cut across it, and it would appear that some knight, killed probably by the blow, was buried beneath the church wall. The belfry tower is at the south-west angle of the church, and in the west wall of the cloisters, immediately south of this, there is a fine Gothic window with a low-pointed arch (see Lieutenant Kitchener's photograph)

The cloisters south of the church are mainly an Arab reconstruction of the fifteenth century, and more rudely built than the mediæval work. The masonry here examined in 1875 was found to have no masons' marks. The piers, with small attached columns in the north cloister, and two on the east, appear, however, to be of the twelfth century. The remaining vaults and piers discovered during excavation are shown on the plan

It should be noted that the bazaar east of this church and abbey is also mainly a mediæval structure, the roofing consists of groined vaults with flat ribs, and the walls have the mediæval dressing, while an inscription on the west wall (see paper on inscriptions, No X) seems to indicate that the property belonged to the Church of St Anne The traces of mediæval work continue north of this bazaar on both sides of the covered street which is called Khân ez Zeit, and which forms part of the Via Dolorosa At the angle of Khân ez Zeit and 'Akabet et Takiyeh, a fine mediæval vault exists, and further north, on the east side of Khân ez Zeit Street, is a pointed arch of stones with the diagonal dressing, having a crozier-like mark on one voussoir—

probably an indication of ecclesiastical property

The Hospital of St. John was still standing in 1322, when Sir John Maundeville describes it. A street divided the Hospital from the church and abbey, running south opposite the south door of the Holy Sepulchre Church. It is specially described in documents of the twelfth century. In 1174 A.D., the King gave the western side to the hospital and the opposite side to the abbey of St. Mary. The remains of vaults opening



into a passage running north and south immediately west of the church evidently indicate the line of the street in question. The latest part of the great group of buildings appears to be that on the south-east, south of the cloisters; differences of masonry and straight joints were here observed, and the arches of the arcade in David Street are pointed. This southern arcade is believed by De Vogüé to be mentioned in the Cartulary of the Holy Sepulchre (1144 A.D.), where are mentioned the 'Voltas Concambii Hospitalis . . . in via quæ ducit ad Montem Sion.' It is, however, perhaps more probable that the bazaar on the east is really intended.

The masonry of the piers in the southern portion of the area is very fine, the stones being of large size and very carefully dressed with a point. A great many masons' marks have been collected in the Muristân at different times, and are here given, being valuable for comparison.

There is a magnificent double cistern, 70 feet deep, occupying the southern part of the area, and extending east and west for a length of 100 feet. In the bottom of this the rock was found falling gently

eastwards, with steps in one or two places. The lie of the rock is shown in the sections which accompany Herr Schick's plan of the Muristân. In 1876 he was able further to examine the lie of the rock in another large cistern east of the bazaars and of the Church of St. Mary the Great

Excavations were made in the Muristân by Sir C. Warren in 1867. A trench was dug, 350 feet long north and south, about 200 feet from the east boundary of the enclosure. The average depth was 25 feet, and shafts 40 feet deep were sunk in two places near the south without reaching rock Rock was found at a level 2,430 in a shaft 70 feet deep, just west of the west wall of the church of Sta Maria Majora (No. 221 of the Register), and at 2,450 in a tank in the north-west corner of the Muristân

The following is Herr Schick's account of his explorations in the Muristân

No. 1 on the plan is a shaft sunk to ascertain whether any vault existed beneath It was driven through earth, with a strong wall on the south running east and west. At 11 feet from the surface the wall rested on earth for 3 feet, with shingle beneath, to a total depth of 21 feet from the surface, when a wall of large hewn stones was reached, and the shaft was stopped.

No 2 was a shaft sunk to ascertain if any tank existed Only earth was found to a depth of 13 feet, when the shaft was abandoned

No 3 was sunk through the roof of a vault with a groined vaulting. This vaulting rested on a fine arch of cut stones (a Crusading arrangement)

No 4, a shaft sunk 2½ feet to a pavement, beneath which, at 5 feet, flagstones covering a drain were found The drain was followed, leading to a larger conduit (No 33 on plan), which is 2 feet 3 inches wide and 6 feet high It runs to the sewer (No 34) under David Street The other end of the passage could not be explored, being stopped by fallen stones, and within the property of the Greek Convent.

No 5, a shaft again meeting the pavement 2½ feet beneath the surface, with a strong wall on the west side. The flagging of the pavement was removed, and a cistern found beneath, with three arches of hewn stone supporting flat flagging, which formed the roof. This cistern (No. 32)

had its bottom 28 feet beneath the present surface The shaft was sunk 20 feet beneath the floor, and rock found at a depth of 48 feet 9 inches beneath the surface in David Street

No 6, a shaft sunk south of a conduit (No. 41), with a wall on the south The conduit bends northwards, and was thought to have communicated with the western part of the large tank (No. 26 on plan). The shaft was sunk lower than the conduit through earth, and 12 feet from the surface another wall was found, and at 21 feet a lower conduit (No 30 on plan), which ran east for 120 feet, when it was choked by the fall of the roof flagging This conduit was 1 foot 10 inches wide and 4 feet high The masonry was very little worn. Two other passages (*a*, *b*) enter from the north

No 7, a shaft sunk through red earth and stones—apparently remains of a brick kiln—to solid earth This shaft was abandoned at a depth of 23 feet from the surface

No. 8, a shaft sunk to examine No. 40 on the plan, which proved to be an old oven It was driven through earth to a depth of 24 feet from the surface and left open

No 9, near the tombs found under the south wall of the church The shaft here sunk passed through 3 feet of earth, and then through shingle The work was abandoned at 11 feet from the surface.

No 10 was sunk in search of a crypt beneath the church apse, but only cross walls were found, resting on earth, at a depth of 14 feet

No 11, sunk to examine Cistern No 31 on the plan, was driven through earth with a well-built wall on the north to a depth of 26 feet, and then abandoned

No 12, west of Cistern No 31 on the plan, was driven through earth and abandoned at a depth of about 30 feet

No. 13 reached a water conduit a few feet beneath the surface, and was only sunk 13 feet, encountering masonry of no great importance

No. 14—Sunk 13 feet through earth without result

No 15 reached a cesspool west of Cistern No 24, 14 feet deep, without any roof The floor was broken through, and it was found to rest on earth beneath.

No 16—Sunk 11 feet beside a wall running east and west, and founded on earth at that depth

No 17.—A large stone trough, standing on solid masonry, was examined, and foundations of small stones discovered beneath

No 18.—A circular building, 7 feet in diameter, was found, full of red earth and clay. It was apparently a well for kneading clay, and dates from the Arab period

Nos 19, 20.—Sunk in the central apse of the church without result. (Cf. No 10)

No 21.—The foundations of the south-west angle of the church here rested on rock 30 feet beneath the surface

No. 22.—A cistern with the lower part cut in rock 30 feet beneath the surface.

Nos 23, 24, 25.—Cisterns with floors 20 to 24 feet beneath the surface They are entirely of masonry

No 26.—The great double cistern or tank in the south-east part of the enclosure It has a barrel vaulting of mediæval masonry, and the floor is of rock There are several manholes in the roof, and two large slits in the masonry, apparently intended for wheels used in raising water (like the modern Nâûrah of the Arabs, in the gardens of Jaffa and Ramleh called Beiyârahs or 'well-places') The section of rock here exposed in the bed of the Tyropœon is the most important within the walls of the modern city. The cistern was visited by Lieutenant Conder in 1873

No. 27.—A conduit in the east wall of this cistern near the bottom leads out eastwards, perhaps leading to another tank. A vertical shaft leads up from it towards the surface.

No. 28.—Two connections here occur with Cistern No. 37.

No 29 marks the position of the waterwheels in No. 26

No 30 (see No 6).—This number marks the lower conduit.

No 31.—A well in the property of the Greek Convent has a conduit (No. 35) bringing water from the direction of David Street

No 32 (see No. 5).—This number marks the cistern

No 33 marks the conduit described under No 4

No 34.—The main sewer under David Street

No 35.—The conduit to No 31

No 36.—Brick (or pottery) pipes bringing water from the west, apparently to a bath.

No. 37.—An ancient cistern, with three mouths in the vaulted roof. It appears to be unfinished

No 38 —An old cesspool, apparently belonging to the latrines of the Abbey.

No. 39 —An arch supporting the southern wall of the arcades

No 40 —A piece of masonry belonging to the oven. (See No. 8.)

No 41.—A conduit leading to No 26 (See No 6)

No 42 —A pier which shows evidence of having been built at two distinct periods

No 43 —A similar enlarged pier stood here, but has been removed

No 44 —Tomb of a Moslem Wely

No 45 —A *Sebil*, or public drinking fountain

No 46 marks on the section the line of the rubbish before excavation

No. 47 —The Moslem stairway on the south wall of the church.

No 48 —The modern Lutheran chapel, in the upper story of the cloisters.

Herr Schick considers that the buildings were divided into several blocks, roofed in, and with narrow lanes between, including that west of the church already noticed

No inscriptions appear to have been found, except one on a pier south of the cloisters, which may possibly mark the site of a grave in the cloister (See Paper on 'Inscriptions,' No 34) The objects found with bones and skulls in the grave near the church were of mediæval date and of very little interest or value

The following is the account of the cistern east of the bazaar given to Colonel Sir C Wilson by Herr Schick ('Quarterly Statement,' 1877, p. 9) .

'It appears that some time last year the ground at a point a little east of the bazaars suddenly gave way, carrying with it a fig-tree and several bushes of cactus, and leaving a large crater or depression in the surface For some months occasional earth-slips took place, and it became evident that the *debris* was finding its way into one or more subterranean chambers , the ground was at the time considered too dangerous for examination, but last summer Herr Schick was requested by the Pacha to investigate the whole matter It soon appeared that the earth had been running away into a great chamber over 100 feet long and 17 feet 6 inches wide, and that the cause of the slip had been the sudden fall of a portion of the covering

arch The interesting point is, that in the floor of the chamber, which is entirely of rock, we have presented to view a larger area of the original surface of the ground on which Jerusalem stands than has hitherto been exposed within the city walls * We have, too, not only the depth of rubbish at a point near which there were few previous rock levels, but the actual fall of the rock over a distance of 100 feet in a north and south direction, or combined with the known level of the rock in the street to the north, a section over more than 200 feet

'I was hardly prepared for the great accumulation of rubbish, 80 feet, at this particular place, or for the rapid fall in the rock, 1 in 4, towards the south, which seems to indicate that the valley running eastward from near the Jaffa Gate is deeper than has generally been supposed, and that it may perhaps partake of the ravine nature of the valley examined by Captain Warren under Robinson's Arch The section from east to west, though only 17 feet 6 inches long, is of value as showing a steady fall of the rock towards the east, and thus indicating that the axis of the spur between the valleys from the Jaffa and Damascus Gates has been passed

'Herr Schick's investigation has also proved that the bazaar called on the Ordnance Map of Jerusalem, $\frac{1}{500}$ scale, Suk al Khowajat, formerly extended as far north as the other two bazaars, and has brought more prominently to notice the great depth of rubbish on which all the bazaars stand

'The long cistern or chamber is parallel to the bazaars, and as it was evidently not originally intended to be used as a cistern, we may perhaps have in it the line of one of the streets of ancient Jerusalem The chamber, at any rate, offers a favourable base of operations for an exploration of this part of the city, as galleries could be driven in several directions to examine the ground'†

Hammâm esh Shefa.

'The Bath of Healing' the curious well, west of the Haram, described in the 'Ordnance Survey Notes' (pp. 60, 85, Plate XXII.). It was revisited in 1871 by Dr T Chaplin.

'A few days ago I received a visit from Herr Victor zur Helle, of Vienna, who informed me that he had been able to enter the hitherto unexplored southern passage of the 'Ain es Shefa, and had followed it to its termination, 96 feet from its commencement He had lost his compass in the water, and consequently could not be certain of the exact direction of the passage, but believed it to be south-west As the water is seldom so low as to admit of an examination of this canal, and the winter rains, which are now anxiously looked for, may soon close it again, I took the earliest opportunity of descending, and the following are the notes of my observations

'The descent was made on the 29th of November, 1870 The passage commences at the southern end of the western wall of the basin It runs 43 feet 6 inches in a direction

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* Except in the great cistern in the Muristân, No 26, above noticed

† The levels of the rock in this cistern are 2,440 at the north end, and 2,420 at the south in feet above the Mediterranean level

264, 13 feet 5 inches 260°, 5 feet 4 inches 181, 12 feet 6 inches 245°, and, lastly, 27 feet 6 inches 174°, its entire length being about 102 feet At its termination it is blocked up by fallen, or most irregularly constructed, masonry, and has no basin A stick could be thrust in under the blocks of stone for about 3 feet, but no continuation of the passage could be made out The floor slopes towards each end, the highest part being about the middle At the entrance, and for some 20 feet beyond, the water was a little over knee deep, in the middle the passage was nearly dry, and at the further extremity the water reached 6 or 8 inches above the knees The canal is 4 feet high and 3 feet broad at the entrance, and of about the same dimensions throughout, except where narrowed by fallen masonry, or widened or made higher by the disappearance of the walls or roof Only at one spot was there any difficulty in passing The walls are of rough masonry, some of the stones being of large size The roof, where perfect, is of thick broad blocks of limestone, laid across No arches, columns, or ornamented stones were observed The rock could not be detected anywhere, though it is possible that it may in some places form the floor Plaster still covers portions of the sides and floor, but the passage is in a very ruinous condition Water was observed trickling down from between the stones of the southern wall, at a spot not far from the entrance, and the sides and roof were in some places very wet, in others nearly dry No appearance of a fountain was discovered, though carefully searched for

'Advantage was taken of the low state of the water to examine the basin somewhat more minutely than has (I believe) hitherto been possible It was found to measure, from north to south, in the middle, 11 feet 9 inches, from east to west, in the middle, 6 feet 6 inches, from east to west, opposite the entrance to the lower passage, 5 feet 10 inches The floor is of rock at the northern part, how far the rock extends to the south could not be ascertained, in consequence of the depth of the water The walls are everywhere of rough irregular masonry Plaster still remains on the northern and southern sides; that on the latter being continuous with that of the lower passage The plastered surface on the northern side extends farther to the east and west than the side walls which abut upon it The plaster is made with small white stones, instead of the usual pounded pottery Water was trickling in a rather copious stream from under the masonry on the east side of the northern passage at its termination, and it was observed that here the masonry rests upon plaster, from between which and the stones the water was running Further north, also in this passage, the walls rest upon a plastered surface

'It can hardly, perhaps, be said that the mystery which has attached to this remarkable well is even now entirely removed, yet every fresh observation tends to confirm the opinion that *its water is derived solely from the percolation of the rains through the débris upon which the city is built.* There is no evidence to show that it proceeded originally from a subterranean source, and it is not likely that, if a fountain had existed here in ancient times, it could have escaped mention by either the sacred or profane writers Probably there was formerly a pool near this situation, into which the water coming down the valley (which drains a large extent of surface) was carefully conducted After the destruction of the city, and the consequent filling up of the pool, the water would still find its way down to the same spot, and either well up to the surface or be reached by means of a shaft As the level of the city continued to rise, a longer shaft would be required, and thus in the course of ages, what was at first a superficial collection of water would become converted into a deep well'—Tho Chaplin, M D., 'Quarterly Statement,' 1871, pp 101-103

The following is Sir C. Wilson's account

'The Esh Shefa well is near the Bâb el Kattanîn of the Haram, and supplies the Turkish bath there On descending the well the different styles of architecture were very noticeable—semicircular arches at the bottom, pointed ones higher up, and near the top the later additions of the present day, the shaft seeming to have grown upwards as the rubbish increased The passage is covered by arches of different sizes, and has been made at various times; the portion cut in the rock seems to be of great antiquity, and was probably connected with the water system of the old city The water was reported to have failed during the winter of 1864-5, but arrangements could not be made for paying it a second visit The plan and section show the details

'The Esh Shefa well supplies the Turkish baths in the old Cotton Market From the bottom of the shaft a channel cut in the rock, and vaulted with masonry, leads down in a southerly direction to a small cave or basin, from which the water is obtained in summer by a man who descends for the purpose No leakage was visible at the side of the passage, but the greater portion of the water probably passes through the deep rubbish above, and thus acquires the peculiar Siloam flavour The supply and quality cannot well be improved'

The rock is 80 feet beneath the surface, at a level 2,339 feet above the Mediterranean. The peculiar flavour of the Siloam and other waters in or near Jerusalem appears to be due to the infiltration of sewage.

Aqueduct to the Twin Pools

This aqueduct, leading from a pit outside the Damascus Gate, was discovered in 1871 (See 'Quarterly Statement,' 1872, p 47) It is from 2½ to 3 feet wide, and in places more than 12 feet high It is throughout high enough to allow a man to pass along it, it is partly hewn in rock, and partly of masonry, with an arched roof, in which are man-holes, now closed, which once led to the surface It appears to have crossed the pit east of the Damascus Gate, and is probably older than this pit, but although surface drains have been found on the west side of the knoll

of Jeremiah's Grotto, which may have led to this channel, no remains of the aqueduct have been found west or north of the gate, where building has been going on for the last ten years The upper part of the aqueduct was destroyed in building the modern city wall, which stands on older foundations This aqueduct, with its continuation south of the Twin Pools, may have been constructed to supply the Temple cisterns It is at a much higher level than that near the Prophet's Gate The levels are given by Colonel Warren in speaking of the Twin Pools

Kŭlât Jâlud.

'Goliath's Castle,' the name now given to the tower in the north-west angle of the mediæval city, known in the twelfth century as Tancred's Tower It has been supposed by Felix Fabri, and by more recent authorities, to mark the site of the tower of Psephinus A plan of the building was made by Lewin, and another by Colonel Wilson ('Ordnance Survey Notes,' Plate XXVII) It was visited and described by Lieutenant Conder in 1872 ('Quarterly Statement,' 1872, p 166), and in 1877 a new plan was made by Lieutenant Kitchener at the time when a new Latin school was erected on the site (See 'Quarterly Statement,' 1878, p 78)

The following is Sir C Wilson's account ('Ordnance Survey Notes,' p 73)

'Excavation No IV This was made at the ruins of el Jâlûd, or Goliath's Castle, in the north-west angle of the city The plans and sections will show the details of what was discovered the trench on the west uncovered a peculiar re-entering angle formed of large stones with drafted margins, on examining this it was found that they must have been built at different periods, the line A, B, faced with large stones, and running into the mass of masonry, first, and the line C, D, which forms the present facing of the tower, afterwards, there is no bond between the two masses a straight joint being left in the direction C, B, the space between the two lines of facing stones is filled in with small rubble masonry, and the backing to the older line, A, B, is of the same description Both rows of large stones are bedded and jointed with mortar, the chiselled drafts are from 2 inches to 5 inches wide, and the faces are left

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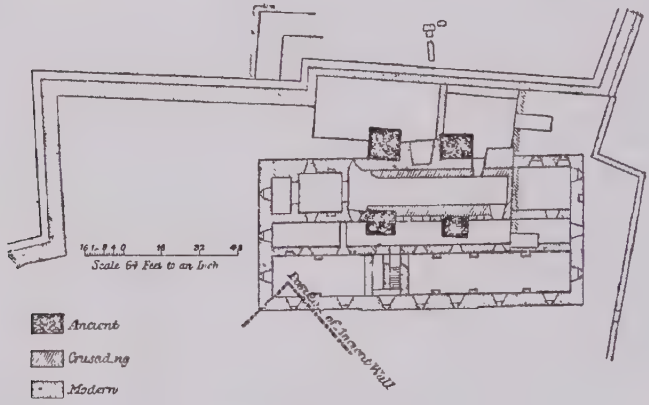
rough, projecting from 4 to 6 inches The line D, C, if produced towards C, would cut the north-east angle of the so-called Tower of David, in the Citadel, and if produced towards D, would pass through the remains (of ancient walls) near Mr Bergheim's house

'Within the Castle there is a vaulted chamber of modern date, and the floor of this was broken through in consequence of a rumour that there were vaults beneath The report proved to be correct, for on creeping through the hole a chamber nearly filled with rubbish was reached, and near the east end of this an open doorway led to two other chambers, in which two piers or towers, constructed of large stones with drafted margins, were found From the appearance of the masonry they



must have existed before the present building, which is built on to it At first they were thought to be part of an old wall, or the towers of a gateway; but, taking everything into consideration, it seems more probable that they were solid piers supporting the groined roof of a chamber beneath some tower of mediæval date, piers of the same character, built with old material, and supporting groined roofs, are seen in several places in the city In this case the groined roof seems to have been destroyed and replaced by a plain pointed arch, to carry which the piers have been connected by substantial party walls, which divide the original chamber into two. The drafts are between 2 and 3 inches broad, and the facing left rough All the covering arches are pointed. The doorway between

the two chambers is of the same style as the one found in the Citadel, the stones of the pointed arch having a chiselled draft run round their margins. There is a large accumulation of dry mud in the chambers, and an excavation was made through this to the floor, which was found to be of rock, covered with a thick layer of cement. The northern faces of the piers could not be found, although the rubbish was cleared away from the place where they should have been.

'Nothing found at El Jâlûd seemed to be earlier than the Saracenic or Crusading period, except, perhaps, the piers, and there was no trace of the foundation of any large octagonal building; there is so much rubbish, however, at this angle of the city, that it would require a regular system of excavation on a large scale to explore it thoroughly; another chamber would probably be discovered north of the two that were found.'

Subsequent exploration during the building of the schools has confirmed the conclusions of Colonel Wilson. The original tower appears to have been a square of about 100 feet side, reaching northwards to the line of the present city wall. Two piers, similar to those found by Colonel Wilson, were found, as he suspected, north of the northern of the two parallel vaults which he explored. The four piers, and the east and south walls of the Castle, are apparently of one date, and the parallel vaults with tunnel roofs are later. The tower presents all the appearance of a square Crusading fortress, with walls 12 feet thick, consisting of rubble faced with fine ashlar of drafted stones. The stones are not of great size, being 2 feet 4 inches high, and 4 feet long. The southernmost vault measures 24 feet north and south, by 53 feet east and west. The two ancient piers are visible in the north-west angle, and in the middle of the north wall. This wall is a partition about 4 feet thick, built at an angle, so that it covers part of the western pier. The masonry is small, and together with the vault above appears to be perhaps Arab work. There is an entrance into this vault from the east, closed by more modern masonry. On the west another entrance leads to a chamber, measuring 26 feet east and west, by 24 feet north and south. The arch of the door consists of five fine drafted stones, with the boss dressed, the arch is pointed, and the voussoirs have evidently been cut for their present purpose. Although the dividing off of this chamber may perhaps have been accomplished later than the original period of the

building of the tower, the masonry, compared with the Crusading work of 'Athlit, Kaukab el Hawa, Kŭlât el Hosn, Kŭlât es Subeibeh, etc, etc, is evidently to be ascribed to the twelfth century. The original vaulted substructures of the tower, as will be seen from the plan, appear to have consisted of three rows of three bays each, probably with groined roofs—a construction common in the mediæval towers and great tanks The identification of this tower with Psephinus is not confirmed by the discovery of any really ancient masonry, while the original shape now proves to have been a square, whereas Psephinus is described by Josephus as an octagon

In 1877 the rubbish was removed, and the old work laid bare to the floor. Two of the stones in the piers measure $7\frac{1}{2}$ feet by 2 feet 8 inches, by 2 feet 4 inches high, and $8\frac{1}{2}$ feet by 2 feet 9 inches, by 2 feet 4 inches high The draft varies from $3\frac{1}{2}$ inches to 4 inches A thin bed of very hard mortar divides the courses, the bosses in some instances project 8 inches; the four courses of drafted stones measure 9 feet 4 inches in total height. Masonry as large as this is not uncommon in Crusading work, although it is possible in this case that old material was used

Tower of David (so-called).

This is one of the most conspicuous monuments of the city, described by every writer on Jerusalem, and identified with Hippicus by earlier writers, and with Phasaelus by most of the later authorities. It measures about 54 feet north and south, by 68 feet east and west (see Plan, 'Ordnance Survey Notes,' Plate III.), and is situated 130 feet from the north-west corner tower of the Citadel, which measures about 50 feet square. The size of David's Tower thus roughly agrees with the dimensions of Phasaelus, which was 40 cubits, or about 53 feet, square according to Josephus It is also remarkable that Josephus describes a cloister 10 cubits above the base, which 'went round about, and it was covered from enemies by breast-works and bulwarks' (5 Wars, iv 3) A similar outwork still exists round the north and east faces of the so-called Tower of David, and although the battlements of the wall of this *chemin des rondes* (as it would be called in a modern fortification) appear to be modern, while the sloping outer scarp with drafted masonry

of moderate size appears (like the sloping scarp of Cæsarea, etc.) to be mediæval, yet this masonry may very probably be only a facing to the original work of the old cloister.

Sir C. Wilson, in describing the modern Citadel, of which the two above-mentioned towers form the northern defence, speaks thus ('Ordnance Survey Notes,' p. 46).—

'The so-called Tower of David appears to be the oldest part of the Citadel: it has a sloping escarp of masonry, round the top of which runs a *berm*, or *chemin des rondes*, and above which the tower rises in a solid mass to the height of 29 feet; upon this the present superstructure is raised. The escarp is faced with large stones, and retains to some extent its original appearance, but time and hard treatment have worn away much of the fine work, and the repairs have been executed in a very slovenly manner. . No entrance, or appearance of one, could be discovered in the solid masonry of the basement portion of the tower, though it was carefully searched for; although many of the stones are much the worse for wear, they appear to be in their original positions, and to have been set without mortar. When repairs have been necessary from decay of the material or fracture of the masonry, they have been made with small stones set in mortar. The marginal draft on these stones is wider than usual, being 4 to 5 inches, and the dressing of the faces seems never to have been finished, as many of the stones are left in the rough state. (The attached sketch in the 'Ordnance Survey Notes' gives a height of 4 feet 2 inches for one of the courses.)

'Above the solid block of masonry there is a plinth course, and over this the superstructure, which contains several chambers and a cistern, the cistern rests on the solid masonry, and is supplied entirely by rainfall, in one of the chambers is shown the Mihrab of David, marking, according to Moslem tradition, the place where David composed the Psalms. In the superstructure, which is badly built, there is a mixture of stones with the marginal draft, and those with plain chiselled faces all set in mortar, and over the main gateway a very unpleasant effect has been produced by suddenly bringing the masonry of the upper part to the face of the large stones, instead of keeping it back on the plinth course.

'The interior of the tower near the saluting battery (north-west tower of the Citadel) consists of one large chamber covered with a pointed arch,

the masonry appears to be a reconstruction, most of the stones have a deeply chiselled draft round their margins, with the faces left rough and turned inwards towards the chamber; from this a passage, the entrance to which is now closed, apparently led into the ditch. Within the chamber there is a cistern, and a second at the entrance of the tower, which were described as being of great size and always containing a good supply of water, when visited they were too full of water to admit of exploration, they are supplied partly by surface drainage, and partly by a branch of the aqueduct from the Birket Mamilla, which, after passing in front of the Jaffa Gate, crosses the ditch on a wall, and then runs into the tower and cisterns Whilst examining the portion of the aqueduct in the ditch, the remains of a conduit were found beneath the Jaffa Gate, and 12 feet below the level of the present one'

With respect to this aqueduct, it should be noted that Josephus (5 Wars, VII 2) speaks of the 'gate where water was brought in to the tower Hippicus.' If the larger eastern tower represent Phasaelus, the north-west tower of the Citadel very probably stands on the site of Hippicus. These Royal Towers were left standing by Titus (7 Wars, 1 1), and only destroyed in 1239 by Dâûd, Emir of Kerak. David's Tower was called the Castle of the Pisans in the Middle Ages, but the solid base appears to belong to the Herodian period.

In 1874, Mr Tyrwhitt Drake and Herr Schick visited the tower together, and in the same year, as well as in 1882, it was examined by Captain Conder

Mr Drake gives some additional information ('Quarterly Statement,' 1874, p 64). Seven courses are visible above the scarp to the plinth 'On some of the stones there is a double draft, which, being in an unfinished state, leads to the conclusion that the draft was worked after the stones had been set in their places. The width of the draft, as I measured it in many places, was 3, 4, 6, or 7 inches, the greater breadth being always at the sides or bottom, usually the latter. The height of the courses varies from 4 feet 1 inch to 4 feet 2 inches The following are the lengths of several stones which I measured 8 feet, 5 feet 2 inches, 9 feet 2 inches, 13 feet 7 inches, 9 feet 5 inches, 10 feet 9 inches, 14 feet, while the breadth at the north-east corner varied from 3 feet 7 inches to 3 feet 8 inches'

Subsequent exploration on the part of Herr Schick led to the discovery of a passage in the solid part of the tower. It is formed by leaving out a line of stones in the fourth course above the level of the top of the scarp. The entrance is from the west, and the height corresponds with the height of a single course (4 feet 2 inches) It runs irregularly eastwards nearly to the middle of the tower. The stones in the interior had plain faces, and were irregularly laid with wide joints

The market-place east of the fosse which surrounds the Citadel appears to be supported on vaults, an entrance exists to these through a closed gate in the counterscarp south-east of the Tower of David. An examination of these vaults, were it permitted by the Turks, would be of considerable interest, as a communication might be found with the passage about to be noticed, while it is also possible that the foundations of the unknown Tower of Mariamne may yet be discovered in this direction

The Great Passage on the Modern Sion

The following is Sir C Wilson's account ('Ordnance Survey Notes,' p. 60)

'In the house of the Rev J Barclay, incumbent of Christ Church, there is a shaft by which access is obtained to a passage running east and west under the Mission premises The rock was found here to be 34 feet below the yard in front of the church; the passage has been cemented, and in its original state was probably a water conduit or drain, the roof is in places of large flat stones, in others of a sort of rough vaulting with large stones as shown on sketch It seems doubtful, however, whether any portion of this formed part of the original covering At the western end is a closed shaft reaching nearly to the surface, and at this point the passage turns off to the left for a short distance, when it is closed by rubbish, the eastern end is closed by the falling in of the roof A great portion of the passage is cut out of the rock'

The total length given by Sir C Wilson (Plate XXI) is 265 feet, exclusive of the bend on the west, which is 14 feet long. The width varies from 1 foot 5 inches to 2 feet 1 inch. The bottom is 37 feet 4 inches beneath the surface in the shaft under the house. The rock is generally 2 to 5 feet above the bottom for about 90 feet from the west

end, when it disappears altogether The west end is entirely rock-cut, the channels being here only some 3 feet high The masonry is of inferior quality, and the vaulting very rude. The passage was discovered by Herr Schick in 1860, when the church was built It was visited by Lewin in 1862 (see 'Siege of Jerusalem,' p 206) He gives the height of the passage as 6 feet The passage is perhaps part of that mentioned by Mejr ed Din as extending from the Citadel to the Gate of the Chain. The level of the secret passage found by Colonel Warren outside the Gate of the Chain was 2,400 The level of the floor of the passage under consideration is about 2,504 towards the west end, the distance between these observations is about 1,400 feet, so that if the two passages are connected, there must be a drop or steep slope in some part of the line.

Ancient Towers on the Modern Sion.

The discoveries made of the level of the rock in different places along the line of the street called Hârat ed Dawâyeh, south of David Street, and further east in the Hârat esh Shârah, appear clearly to indicate a sort of scarp or very steep slope facing northwards, and running parallel to David Street on the south. During the erection of the Mission School (marked No. 67 on the Ordnance Survey) the remains of two old towers in a line east and west were found immediately north of the Hârat ed Dawâyeh (see Lewin's 'Siege of Jerusalem,' pp 215-217) They are now hidden beneath recently constructed cisterns The western tower had an interior measurement of 9 feet east and west by 8 feet north and south, with a doorway 5 feet wide on the west side. The floor was 36 feet beneath the level of the street (or about 2,470 above the Mediterranean). The supposed door had a round arch 18 feet above the floor at the soffit of the crown, and there was a second arch 8 feet above this The second building was 64 feet to the east, corresponding in dimensions, but without any door, projecting stones in the wall seemed to indicate an internal stair. South of these towers, and between them, were remains of a massive wall of masonry, smaller than that of the Haram, and not drafted There are at present no means of judging the antiquity of these remains

Remains in the Jews' Quarter

In May, 1872, Mr C F Tyrwhitt Drake examined some remains in the Jews' Quarter pointed out to him by Dr T. Chaplin, these were again visited by Captain Conder and Dr Chaplin in 1881 They appear to have escaped the observation of the Duc de Vogué, whose work on the churches of the Holy Land contains careful descriptions of all the other Crusading remains as yet known in Jerusalem

The first of these remains is a chapel, now converted into a living room, in the house of a Morocco Jew It is situated on the south side of the street called Hârat el Meidân, where it runs east and west, and immediately west of the southern alley near the bench mark 2,485 of the Ordnance Survey It is perhaps this chapel which was called St. Thomas of the Germans There are only two apses visible on the east side of the room, which are now fitted with wooden doors, and used as cupboards, they measure 5 feet and 7½ feet in diameter, the southern being the largest A third probably exists behind the south wall of the room The length east and west was about 12 feet. The roof consists of two groined vaults, but the whole is so covered with whitewash and plaster as to be barely recognisable as mediæval work

The second ruin is found in the block of buildings which stand on the scarp facing east towards the Haram It is entered from the small square in the Hârat el Meidân, east of the last-mentioned site. The remains of ribs of vaulting springing from the walls indicate that a large mediæval building stood here There are vaults below with pointed arches and rubble work One of these is T shaped, with a groined roof and flat-pointed arch This was believed to be full of treasure, which turned to charcoal when touched The corbels supporting the ribs above have boldly cut leaves, such as are common in Crusading capitals The lintel stone of the door of the house has an effaced Latin inscription on it. the date 8 NOV is legible These substructions belong probably to the old Hospice of St Mary of the Germans, which stood in the twelfth century in this part of the town Immediately west of the square is a house in the courtyard of which is a well said to contain a spring of water which has a brackish taste the well is 33 feet deep.

Further west in the same quarter of the town is the so-called Beth

Ruakh hak Kodesh, or 'House of the Holy Ghost'—probably the site of the old monastery. It stands south of the Hârat el Yehûd, which runs from the great Armenian Church of St James eastwards. The site is marked by the alley with a level 2,527 near B.M. 2,504 1 North of this again is the Hârat es Suriân, with the Syrian monastery and Church of St Thomas The north entrance to the monastery has a fine Crusading doorway, like that on the west of the rotunda of the Holy Sepulchre Church Near the street which leads east to the Jews' Wailing-Place is a little sacred shrine of Sheikh 'Aid, in the street called Hârat el Mughârbeh, south of the corner marked B.M 2,399 1, and on the east side of the street The west entrance to this building seems possibly to be a Crusading arch It should be remembered that the southern part of the city was not the Jews' Quarter in the Middle Ages, for, as shown by the 'Citez de Jherusalem,' they then inhabited the Juiverie, answering to the modern Moslem Quarter of the city, north of the Haram.

Dr Guthe's Excavations.

On the 27th May, 1881, these works were courteously shown by Dr Guthe to Captain Conder and Lieutenant Mantell, R E The principal discovery on the Ophel hill was that of a small tower and a rock scarp south of the point, to which Colonel Warren traced the Ophel wall. The stones were well cut, of moderate size, not at all approaching the Haram stones, but rather resembling the later Byzantine work in the Haram They were not drafted, and their proportions were very square There were three courses setting back one on the other. This masonry stands on the north on rougher masonry, and on the west face it is seen to be founded on a scarp of rock apparently of no great height A little further south a wall was visible just below the surface, running south The stones were 2 or 3 feet long, with a broad irregular draft and rustic bosses; the dressing and general appearance seemed to suggest Byzantine work. The wall stood on a low scarp of rock.

The most northerly excavation was a hundred yards west of the Virgin's Pool The wall on the low scarp was about 200 feet further south The tower was between these two. None of the stones were more than 1 foot 6 inches high, nor longer than 4 feet.

Further south-west, some caves and cisterns and remains of a vaulted building, with tesselated floors, were examined. These may have belonged also to some large monastic building on the hill West of the Old Pool, below Siloam, a corner of another building was excavated, also of drafted masonry, which appeared to be probably either Byzantine or Crusading. Although the scarp running north and south on the east side of the Ophel hill may perhaps be a continuation of the line explored by Sir C Warren, there appeared to be no discovery of any masonry likely to be of great age The excavations would require to be far more numerous and extensive than those of Dr Guthe in order really to gain a complete knowledge of the topography of this part of the city

The remaining buildings of interest within Jerusalem are noticed in the paper on the architectural history of the city The Ordnance Survey notes give detailed accounts of the Haram, the Holy Sepulchre Church, and other remains of the mediæval city The two works of De Vogué on the Temple and on the Churches of the Holy Land should also be consulted by the student of Jerusalem topography; but the present volume contains a notice of every monument in and round Jerusalem which has as yet been discovered down to the year 1882, and a description of every such monument considered to date earlier than 70 A D, as well as of all the more important since that time.

Rock Levels

The accumulation of rubbish in Jerusalem is so great that our only means of ascertaining accurately the original features of the natural site must depend on a careful examination of the levels of the rock For although when the city was first inhabited the rock was no doubt in many places covered with the red virgin soil which Colonel Warren often found at the bottom of his shaft, yet even this red soil is not a safe indication, as there are instances in which it has been found with *débris* beneath it again The rock levels give us the *maximum* differences The surface levels of the Ordnance Survey give us the *minimum* differences, and, controlled by the surface contours, we are able to cut sections through any part of the city, and discuss on a sound basis the question of relative heights, and situation, of the old hills and valleys

Colonel Wilson was the first to set on a proper scientific basis this question of the natural contours, modern and ancient He has marked on the Ordnance Survey all the levels of the rock where it appeared above the surface, and the Ordnance Survey plan is accurately contoured at vertical differences of 10 feet, and referenced to the level of the Mediterranean, the levels being those of the surface in 1864, which have not been materially altered since, although some fresh accumulations of rubbish have occurred outside the Jaffa Gate and in a few other places.

Colonel Warren was always most careful to ascertain with accuracy the rock levels in tanks, shafts, and galleries during his explorations, and added materially to our knowledge of the rock, especially in the vicinity of the Haram enclosure Both these scientific explorers urged on the town architects the value of recording all observations possible of the depth beneath the surface at which rock was found in digging foundations or otherwise

The record of his own observations was obtained in 1873 by Lieutenant Conder from Herr Konrad Schick, at the instance of Colonel Warren These observations are often not as accurate as those of the Ordnance Survey or those taken by Colonel Warren, but they may be relied on within 2 or 3 feet, and their number makes them of great importance, as no questions of topography depend on such minute accuracy as to be affected by even a yard in depth, while the drawing of contours is only possible when a great number of observations are available

The excavations of the Muristân in 1872 laid bare the rock in the great cisterns for a distance of over 100 feet east and west, and thus gave most valuable information as to the course of the Tyropœon Valley. Another fine series of observations was obtained further east by Herr Schick in 1876, in a great tank outside the Muristân

From the rock levels, numbering 265 in all, contoured, plans have been prepared by Colonel Warren, Captain Conder, and Herr Shick independently. Although these differ in some minor details, they are substantially in accord, the observations being only deficient in the quarter of Haret Bâb es Silsileh, where, however, the surface contours control the sections. The small differences can only be settled by further observations, which there is no immediate prospect of obtaining, and they are of no archæological importance

The whole register of levels published in the 'Quarterly Statement' in 1879 was carefully revised by Captain Conder and Herr Schick in 1881, during the late campaign in Palestine, and Herr Schick states that it may now be relied on for accuracy

Next to the Haram levels the most valuable are those which determine the depth of the Tyropœon Valley, and the question of these levels is therefore treated *in extenso* The discovery of a scarp 12 to 14 feet high facing east, and running parallel to the street northwards from the Damascus Hotel, was an important addition in 1881.

Notes on the Register

1 This register includes all the recorded observations in Jerusalem—total 265 Those marked (O) are taken from the Ordnance Survey Notes and Plan, dating 1864—5. Those marked (W) were taken by Captain Warren in 1867—70, as noticed in the 'Recovery of Jerusalem' Those marked (S) were collected by Herr Konrad Schick, and are mainly the results of excavations for the foundations of houses Those marked (C) were observed by Lieutenant Conder in 1872—5 and 1881—2.

2 The levels depend on, and are referred to, the surface levels marked on the Ordnance Survey

3. Negative results of value have also been obtained In 1872 all the chambers under the platform of the Dome of the Rock on the south and south-west were examined by Lieutenant Conder. No rock was found in them, the general floor-levels being 2,420

4 From these levels the contoured plans which accompany the present volume have been prepared.

5. The contours on Ophel are not included in this register. The levels of the rock on this spur were determined in twenty places by Sir C. Warren

INTERIOR OF HARAM

No	Position	Level	Depth below surface	Authority	Remarks
1	Highest crest of Sakhrah	2440	.	O	5 ft 3 in above floor
2	Dome of the Rock 100 ft E of last	2432	3	C	Excavated, 1874
3	Kubbet el Arwâh	2435		C	Surface
4	E wall of Platform 180 ft N of steps	2421		C	1 ft above base of wall
5	E wall of Platform 80 ft N of last	2423		C	4 ft above base of wall
6	Flat rock 50 ft E of last	2419		O	Surface
7	Flat rock 120 ft. S of S E corner of Platform	2420		O	Surface.
8	N wall of Platform 50 ft E of top of N W stairs	2432		C	2 ft above surface
9	Flat rock N of N W stairs	2430		O	Surface
10	Top of rock scarp, E wall of chamber No 24	2433	2	C	Examined, 1872
11	Bottom of ditto (rock falling W 30°)	2425	9	W	Recov Jer, p 214
12	Kubbet el Khudr floor	2426		C	Surface
13	E side of N door of last	2428		C	2 ft above surface
14	N W corner outside same	2425		C	Surface
15	Flat rock N W corner of Haram	2425		O	Mean surface
16	Highest point (at steps) of scarp in N W corner of Haram	2462		S	30 ft above interior
17	E end of same scarp	2432 5		S	13½ ft above interior
18	Scarp on W Haram wall, highest point 80 ft N of Bâb es Serai	2447		S	7 ft above interior.
19	S face of same scarp at window in Haram wall S of last	2434		C	3 ft above interior (1873)
20	Under sill of Triple Gate	2378	1	W	Recov Jer, p 230
21	W wall of passage 60 ft N of outside line of Triple Gate	2388		W	Surface of floor
22	W wall 130 ft N of last	2396		W	3 ft above floor
23	Cistern No 1	2427	12	W	Recov Jer, pp 206—217
24	„ No 2	2429	6	W	
25	„ No 3	2426	9	W	
26	„ No. 4	2417	18	W	
27	„ No 5, N W end	2425	10	W	
28	„ „ S.E. entrance	2408	8	W	
29	„ No 6	2410 5	5 5	W	
30	„ No 7, average	2411	5	W	
31	„ No 8, average	2411	5	W	
32	„ No 9	2400	15	W	Doubtful, p 208
33	„ No 10	2387	31	W	
34	„ No 11	2397	19	W	
35	„ No 12	2406		W	Surface.
36	„ No 13	2409		W	Surface
37	„ No 14	2409		W	Surface
38	„ No 15	2393	15	W	
39	„ No 18	2424	4	W	
40	„ No 22	2426	4	W	
41	„ No 23	2429		W	Surface
42	„ No 25	2416	20	W	
43	„ No 28	2412	3	W	

INTERIOR OF HARAM—*continued.*

No.	Position.	Level.	Below	S.	Remarks.
44	Cistern No. 29, top of scarp	2419	10	W	
45	W. of last	2417	...	S	
46	Cistern No. 34	2431	4	W	
47	,, No. 35	2429	6	S	Doubtful.
48	,, No. 36	2411	5	C	

OUTSIDE HARAM WALLS.

49	W. Haram wall at Wilson's Arch	2339·75	82·25	W	Recov. Jer., p. 81.
50	W. pier (42 ft. W. of last)	2347·25	75	W	
51	W. Haram wall, Tyropœon Bridge	2325	62	W	,, p. 104.
52	Prophet's Gate 14 ft. W. of wall	2320	90	W	,, p. 114.
53	,, 7 ft. N. of N. jamb	2320	74	W	,, p. 115.
54	Hammâm es Shefa, S. end	2339	80	O	
55	Rock surface at S. end of Aqueduct from Twin Pools (channel 2406 at bottom)	2409	22	C	Measured 1873.
56	S. Haram wall 90 ft. E. of S.W. angle	2289	85	W	Recov. Jer., p. 97.
57	S. Haram wall 213 ft. E. of S.W. angle	2322	52	W	
58	S. Haram wall 14 ft. S. of Single Gate	2334	35	W	,, p. 132.
59	S. Haram wall S.E. angle, falls E. 1 in 9	2277	80	W	
60	S. Haram wall 16 ft. W. of last	2287	73	W	,, p. 138.
61	E. Haram wall 15 ft. N. of S.E. corner	2287·5	70	W	,, p. 149.
62	E. Haram wall 18 ft. N. of S.E. corner	2298·8	60	W	
63	E. Haram wall 41 ft. N. of S.E. corner	2279	80	W	,, p. 147.
64	E. Haram wall 162 ft. N. of S.E. corner	2312	70	W	,, p. 151.
65	Golden Gate S. jamb	2360	33	W	,, p. 97. Estimated.
66	N.E. tower of Haram S. side	2293·2	112	W	Recov. Jer., p. 183.
67	,, ,, 200 ft. E.	2317	30	W	,, p. 176.
68	,, ,, 135 ft.	2317	47	W	Falls S. 1 in 4.
69	N.E. angle of Haram 100 ft. E. of wall	2341	64	W	Recov. Jer., p. 178. A little N. of next.
70	N.E. angle of Haram 97 ft. due E. of wall	2337	59	W	Recov. Jer., p. 180.
71	E. wall of Haram 18 ft. S. of N.E. angle	2330	74	W	,, p. 181.
72	Outlet of Birket Israil	2344	60	W	Estimated.
73	72½ ft. S. of No. 66	2282	120	W	
74	45 ft. ,, ,,	2289	115	W	
75	61 ft. ,, ,, (rising N.)	2278	125	W	Greatest depth, p. 187.
76	104 ft. ,, ,, (rising S.)	2289	115	W	

MOSLEM QUARTER OF CITY

No	Position	Level	Depth below surface	Authority	Remarks
77	256 ft. E of Bâb Sitti Miriam	2370	21	W	Recov Jer, pp 174—177
78	162 ft „ (scarp 20 ft high)	2379	30	W	Top of scarp.
79	109 ft „ (rising W. in steps)	2388	23	W	
80	43 ft. N of Bâb Sitti Miriam	2400	19	W	
81	34 ft S of „	2390	20	W	
82	78 ft S of „	2377	33 5	W	
83	Outside Church of St Anne	2410		W	Surface, p 193
84	N W corner of Birket Israil	2360	15	W	p 189
85	53 ft E of last	2344	30	W	
86	Cistern 33 ft W of Tarîk Bâb Hitta, 61 ft. N of Tarîk Bâb Sitti Miriam	2385	36	W	p. 195
87	Top of 'Akabet et Takîyeh	2477		C	Above surface
88	Ecce Homo Arch	2436	9	O	
89	W of Street el Wâd at Catholic Armenian Monastery	2378	40	W	Recov Jer, p 281
90	Scarp over Cotton Grotto	2524		O	Average
91	400 ft W of Bâb ez Zahrah	2520	..	O	„
92	N E corner of city, highest point of scarp	2474	.	O	Base of city wall
93	E side of Tarîk Bâb el Amûd, 60 ft N of 'Akabet Sh S'ad	2420	35	S	
94	W end of arch in alley E of N end of Sûk el 'Attarîn, close to B M 2472 5	2470		S	Surface.
95	At arch E of last	2457	10	S	
96	N end of vault S W of last	2440	30	S	Discovered 1876
97	S „ 120 ft S of last	2420	50	S	„ „
98	N side of street 180 ft E of last	2400	45	S	Surf. marked 2445 on O S
99	N E of arch 60 ft S of last	2400	45	S	
100	Corner of Sûk el Kattanîn and el Wâd	2390	10	S	
101	80 ft N of Bâb el Hâdid in N W corner of court	2365	35	S	
102	100 ft S of et Takîyeh	2430	7	S	
103	W of last, S W of et Takîyeh	2444	5	S	
104	'House of Dives,' point 2412 O S	2360	52	S	
105	W. of last 130 ft, N side of Via Dolorosa	2374	50	S	
106	S. of B M 2420 6 on Austrian Hospice, 17 ft W of 89	2400	17½	W	Recov Jer, p 281
107	Opposite French Consulate on E	2402	45	S	Foundation
108	N side Via Dolorosa under wall of Austrian Hospice opposite Armenian Catholic Monastery	2420	5	S	
109	W end of scarp N of Via Dolorosa	2440	5	C	Measured, 1874
110	E. end of same scarp in chapel of Sisters of Sion	2456		S	The scarp is about 20 ft high (see No 88)
111	Scarp at N end of Twin Pools	2454	10	S	Scarp 37 ft high

MOSLEM QUARTER OF CITY—*continued.*

No.	Position.	Level.	Depth below surface.	Authority	Remarks.
112	Scarp at S. end of Twin Pools	2458	...	S	Surface of Barracks.
113	Rock between Twin Pools, S.	2400	48	S	The S. scarp is 58 ft. high.
114	" " " N.	2417	50	S	W. side of pool rock, 2410 to 2420.
115	Arch in Tarik Bâb ez Zahreh, N. of B.M. 2479·1	2474	12	S	
116	Second arch 100 ft. N. of last	2489	...	S	Just beneath surface.
117	Tarik Sh. Rihân E. of English Consulate, opposite B.M. 2489·6	2477	12	S	
118	Corner of same street, 50 ft. E. of B.M. 2442·1	2400	40	S	
119	150 ft. N. of B.M. 2462, which is opposite Austrian Consulate	2471	7	S	
120	E. side of street N. of el Malawiych	2503	3	S	
121	N. of last 50 ft. S. of B.M. 2525·2	2504	2	S	
122	100 ft. W. of B.M. 2525·2 at 2502	2503	...	S	1 ft. above surface.
123	N. side of Harat Bâb Hitta, 80 ft. W. of B. M. 2501·6	2496	8	S	
124	Alley N. of last, W. of point 2508	2498	10	S	
125	In garden 200 ft. N. of last	2522	...	S	Surface.
126	N. side of Hârat Bâb Hitta, 150 ft. E. of Tarik Bâb ez Zahrah	2497	6	S	420 ft. S. of N. city wall.
127	Corner of Sikket Deir el 'Adas, 100 ft. S. of Madeleine Church	2474	6	S	
128	Same street, corner N. of Madeleine Church, near point 2483	2487	...	S	4 ft. above surface. Doubtful.
129	Opposite B.M. 2450·9 at 250 ft. S. of, and 500 ft. W. of city walls	2446	5	S	
130	At 80 ft. S. of B.M. 2468·4, 180 ft. W. of city wall	2440	20	S	
131	'Akabet Abu Waly near point 2441	2399	35	S	
132	At 50 ft. E. of arch in Sikket Deir el 'Adas in buildings between 'Akabet Abu Waly and 'Akabet Sh. Hasan	2457	6	S	

JEWISH QUARTER OF CITY.

133	Surface of scarp opposite Haram	2430	...	O	General level.
134	At W. pier Tyropœon Bridge, 41½ ft. W. of Haram wall	2345·5	42	W	Recov. Jer., pp. 95—99
135	285 ft. W. of Haram wall, same line as last	2379·5	21	W	
136	250 " " " "	2388·6	18	W	
137	216 " " " "	2377·5	32	W	

JEWISH QUARTER OF CITY—*continued*

No	Position	Level	Depth below surface	Authority	Remarks
138	182 ft W of Haram wall, same line as last	2383 5	22	W	
139	132 „ „ „ „	2369	30	W	
140	92 „ „ „ „	2354 5	40	W	
141	Corner 180 ft N of W wall of German Jewish Hospital	2451	45	S	
142	N wall, same hospice	2436	10	S	
143	Hârat el Mastah, S end, E. side of street	2456	40	S	
144	Same street, 60 ft N of last	2452	38	S	
145	Corner, 90 ft S of N wall of synagogue, No 53 (OS)	2460	26	S	
146	80 ft E of last	2455	44	S	
147	Under synagogue No 58 (OS)	2497	2	S	
148	N of last by point 2508 on E. side Hârat el Jawâny	2480	25	S	
149	Under large synagogue, No 57 (OS)	2476	17	S	
150	W of arch in Hârat el Yehûd, near synagogue, No 47 (OS)	2468	30	S	
151	Hosh Nammer, middle of street on N side	2472	30	S	
152	In alley S W of Caraite Synagogue, near point 2497	2477	20	S	
153	Synagogue No 48 (OS), S E corner	2464	34	S	
154	Synagogue No 48 (OS), N E corner	2465	30	S	
155	Synagogue No 48 (OS), N W corner	2475	25	S	
156	Steps in Hârat el Meidân, S of northern arch	2412	35	S	
157	Corner S of last	2420	32	S	
158	150 ft W of last, near No 6 (OS)	2457	12	S	
159	Hârat el Meidân, E. side, N end of third arch from Temple street	2456	3	S	Checked 1881
160	At 70 ft E of last	2409	40	S	
161	Wall west of Wailing Place	2323	70	S	
162	Gennath Gate (so-called)	2449	34	W	Recov Jer, p 276

ARMENIAN QUARTER

163	N W angle Prot Bishop's Palace	2500	40	S	See OS, p 60, Aqueduct with rock, 2504
164	E wall do	2510	30	S	
165	N E. angle Bible warehouse	2520	20	S	
166	W wall English church	2512	38	S	
167	N W angle do.	2509	41	S	
168	S W corner courtyard, do	2521	22	S	

ARMENIAN QUARTER—*continued.*

No	Position	Level	Depth below surface	Authority	Remarks
169	N W corner of school, S of church	2515	28	S	
170	S W do	2536	10	S	
171	Cistern in barracks S of castle	2537	7	S	
172	David Street S side, E end of arch E of Christian Street	2478	40	S	
173	Cistern N E corner of Armenian convent garden	2527	17	S	
174	Cistern 100 ft S of last	2520	24	S	
175	Cistern 80 ft S of last	2517	22	S	
176	Corner of Hârat Deir es Suriân, N of B M 25055	2485	25	S	S side of Mission Hospital.
177	W. end of alley S of Syrian convent	2492	20	S	
178	S side of same alley near point 2512	2492	20	S	
179	W corner of arch in front of synagogue No 60 (O S)	2515	20	S	
180	Hârat el Jawâny, E side point 2505	2492	13	S	
181	Hârat el Armen, S W corner of southern arch	2529	16	S	400 ft N of S city wall
182	Cistern 100 ft N W of Bâb en Neby Dâûd	2516	11	S	
183	Cistern 50 ft N W of last	2518	10	S	
184	S wall of building E of B M 24998	2490	10	S	E of Hârat Bâb Neby Dâûd
185	Latîk Bâb en Neby Dâûd, 50 ft S of southern arch, W side	2484	20	S	
186	At 100 ft S W of last	2510	20	S	Doubtful

CHRISTIAN QUARTER

187	Church of Holy Sepulchre, Tomb of Nicodemus	2485		C	Possibly higher.
188	Church of Holy Sepulchre, above Chapel of Adam	2495		C	N B Floor of the Calvary Chapel, 2494 Checked 1882
189	Church of Holy Sepulchre, N. of Latin Chapel	2479		C	
190	Church of Holy Sepulchre, N W. corner, S courtyard	2473	7	S	
191	Church of Holy Sepulchre, in front of Convent of Abraham	2458	18	S	
192	Church of Holy Sepulchre, West door	2495	8	S	Top of ridge

CHRISTIAN QUARTER—*continued*

No	Position	Level	Depth below surface	Authority	Remarks
193	Church of Holy Sepulchre, S E corner of courtyard, above Chapel of Helena	2480		S	Surface
194	Excavation No VI OS	2470	7	O	Excavated 1864
195	Kala't Jalûd S side	2580		O	Surface
196	„ „ city wall, N of	2576	4	W	Recov Jer, p 285
197	„ „ 140 ft N	2570		O	Average surface
198	Outside city wall, 700 ft N E of Kala't Jalûd	2527		O	Surface
199	Corner of Hârat Istambuliyeh, 250 ft E of Kala't Jalud, by Convent of St Basil	2567	5	S	
200	N wall Latin Convent (18 OS)	2549	10	S	
201	Hârat Istambuliyeh, foundations of Convent of St Theodore	2565		S	Surface
202	W of same street, 80 ft N of Convent of St Demetrius	2537	8	S	
203	Latin Patriarchate, N E angle	2549		S	Approximate
204	Latin Patriarchate, 50 ft E of last	2557	13	S	
205	Latin Patriarchate, W wall, 100 ft from N W angle	2534	14	S	Doubtful.
206	Church of St Saviour, under floor	2532	20	S	
207	Hârat el Watîyeh, 140 ft N E of last	2553	3	S	
208	Grounds of Patriarchate, S E corner	2553	12	S	
209	At 50 ft N of B M 2563	2553	10	S	
210	100 ft W of Greek Catholic Convent	2522	20	S	
211	W side of Hârat Istambuliyeh, between St Demetrius and Greek Catholic Convent	2525	12	S	Another observation by Schick, 1881, close by, gives 2428
212	Greek Catholic Convent (11 OS)	2523	17	S	
213	Pool of the Bath, middle of N. side	2512		S	Surface
214	„ „ W side	2510	9	S	
215	„ „ S W corner	2500	20	S	
216	Mediterranean Hotel, S W corner	2494	32	S	
217	German shop, N W corner, 70 ft N W of last	2494	32	S	
218	100 ft N W of W door Holy Sepulchre Church	2500	15	S	
219	N of Holy Sepulchre Church S W of Khankah	2479	30	S	
220	Muristân N W corner 60 ft S of Minaret Jâmi'a' el 'Omary	2462	54	W	
221	Church of St. Mary Magna, west wall	2438	31	W	

CHRISTIAN QUARTER—*continued.*

No.	Position.	Level.	Depth below surface.	Authority.	Remarks.
222	Cistern mouth, 120 ft. N. of S.E. corner of Muristân	2426	53	C	
223	Bottom of large cistern S.W. of last	2429	50	S	Visited by Lieutenant Conder, 1872. Rock stepped and falling E.
224	Corner of Via Dolorosa and Khan ez Zeit, B.M. 24619	2465	..	C	
225	House W. of German Hospice of St. John	2485	...	S	
226	Corner of Khôt el Khankah, and 'Akabet el 'Asafir	2487	...	S	Surface.
227	50 ft. N. of entrance to German Hospice	2455	13	S	
228	E. of 'Akabet el 'Asafir, 40 ft. N.E. of No. 226	2484	...	S	Surface.
229	In front of Damascus Hotel	2437	24	S	
230	N. wall	2453	13	S	Scarp found 1881, running N. from these about 14 ft. high, facing E. Level 2467.
231	W. of last, 70 ft. from Tarik Bâb el 'Amûd	2470	...	S	Rock on surface.
232	'Akabet el Batikh, W. of point 2494	2489	5	S	
233	Between last and Convent of St. John Euthymius, N. of B.M. 2501·8	2497	7	S	
234	Corner opposite St. John Euthymius on north	2486	20	S	
235	N. of Khankah, E. of Deir es Seiyideh, and of Street	2477	30	S	
236	Spanish Consulate, N. wall	2489	11	S	
237	E. end of second alley, N. of last at point 2484	2462	22	S	
238	E. end of next alley, N. of last at point 2482	2470	12	S	Scarp of 10 ft. here, bottom 2460.
239	N. side of same alley	2483	8	S	Surface.
240	Jews House of Industry, B.M. 2490	2480	10	S	
241	E. end of alley opposite No. 238	2480	12	S	
242	Open ground near city wall, 50 ft. N.W. of point 2501	2483	18	S	
243	150 ft. S. of last, in street, 100 ft. N. of B.M. 2502·1 west of point 2499	2494	5	S	
244	W. side of winding street 80 ft. N.E. of last	2487	15	S	
245	Corner of House 100 ft. W. of B.M. 2517·2, which is on corner N.W. of Greek convent of St. Catherine	2517	12	S	

OUTSIDE THE CITY

No	Position	Level	Depth below surface.	Authority	Remarks
246	240 ft E of S E angle of Haram (Bed of the Kedron Valley)	2171	385	W	Recov Jer, p 97 The rock was traced 175 ft W
247	Golden Gate, 133 ft E of S side of gate, rock rising W 1 in 4	2312	30	W	Recov Jer p 154
248	Cœnaculum, N end of courtyard	2504	15	S	
249	„ middle S wall	2479	30	S	
250	„ at cross roads, 50 ft W	2495	25	S	
251	Rock tower foundation under Protestant School on Sion	2483		C	Scarp is 36 ft high, 9 ft above passage
252	Rock platform W of last	2447	31	C	
253	Scarp S.E. of tower (top)	2485		C	Average.
254	Outside school washhouse on E	2472		C	Surface
255	Back of shoemaker's shop, N of last	2467	42	C	For these observations, 250—259, see Lieutenant Conder's plan of this scarp
256	N. end of scarp, N. of Tower	2480	.	C	10 ft above surface in cemetery
257	Tower in S E corner of Protestant cemetery (top of scarp)	2480		C	
258	Bottom of same scarp	2435	35	C	
259	Scarp running N E from last	2500	.	O	Surface
260	Cistern opposite last on S E	2480		O	Surface
261	Rock 400 ft S W of No 250	2380		O	Surface.
262	„ 400 ft S of last	2350		O	Surface
263	Scarp 200 ft W of Pool of Siloam (top)	2200		O	Surface
264	Scarp 300 ft E of pool	2160		O	Surface
265	Scarp 500 ft N of Aceldama	2180		O	Surface

The Tyropœon Valley (Rock Levels).

The accompanying plan, embracing part of the City of Jerusalem between Christian Street on the west and Valley Street on the east, and between the slope of Sion, south of David Street, on the south, and the Via Dolorosa on the north, has been constructed with a view of showing how the observations of the levels of the rock beneath the surface affect the question of the depth and width of the Tyropœon Valley near its head

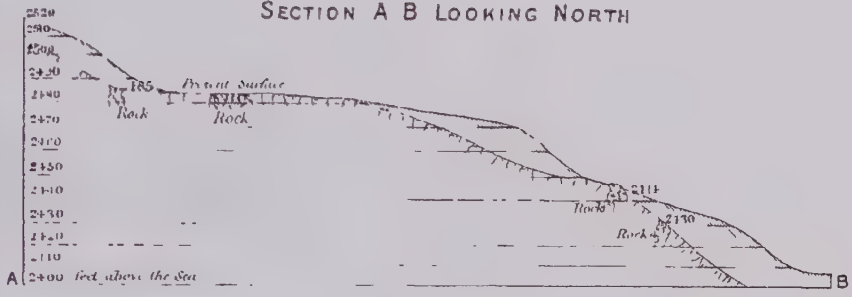
The plan includes 56 actual observations of the rock, and is fairly representative of the kind of information obtained throughout Jerusalem, as the known points in other parts are, if anything, more numerous in comparison with the area—excepting always the ground immediately west of the Haram, where few measurements have been made

The area in the present plan has, however, been selected, because the accumulation of *débris* in this part of the city is greater than in almost any other part within the modern walls, and for this reason the observations of the rock have here given results of more importance than in any other quarters of Jerusalem. By glancing the eye along the surface contour, No 2,449, and then along the rock contour, No 2,450, and observing the wide divergence between them, it becomes at once evident that a great alteration has taken place in the original outline of the ground.

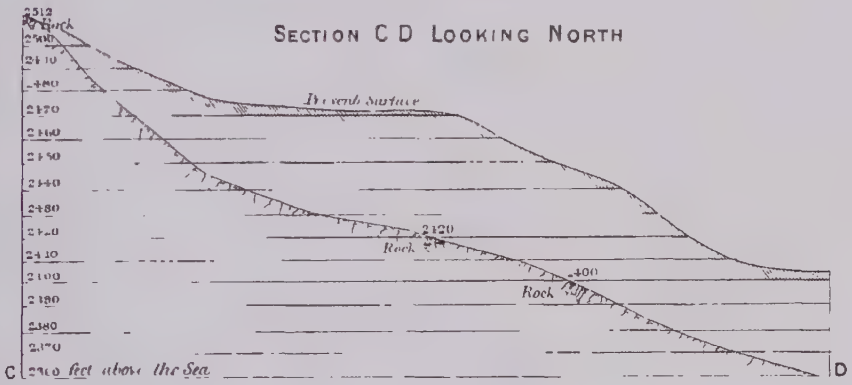
The only method by which general results can be obtained from isolated observations of level is by the use of contours, or lines of equal level, the tracing of which indicates the relative positions of the features of the ground By this method Colonel Wilson has delineated the supposed outline of the present surface beneath the houses of the modern city, and Colonel Warren has employed the same principle in his plan of rock surface in the Haram area In the case of the present surface the number of observations is of course considerably larger than it has been as yet possible to obtain by soundings of the rock, taken in deep excavations, or under the foundations of houses, or in cistern mouths. The surface contours are consequently more accurately traced, but all contours are approximations more or less close to actual surfaces, answering to the lines which in section may be drawn to indicate the supposed lie of the rock between known points

It is not, however, on the known levels of the rock alone that the contours depend in the case of the present plan They are controlled by two other considerations In the first place by the surface levels and contours, for it is evident that the rock level must never be higher than the surface contour, except in cases where the rock is visible above the general surface In the second place the level of the floor of various vaults and cellars being known, it is practically almost certain that the rock in their vicinity does not occur at a level higher than that of these

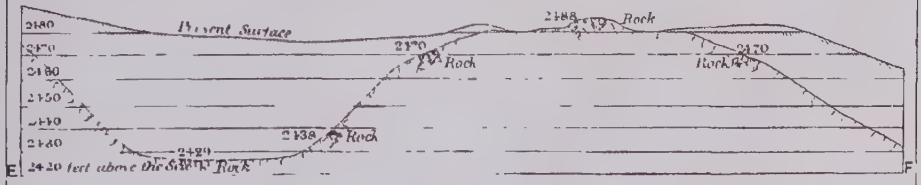
Section A B Looking North



Section C D Looking North



Section E F Looking West



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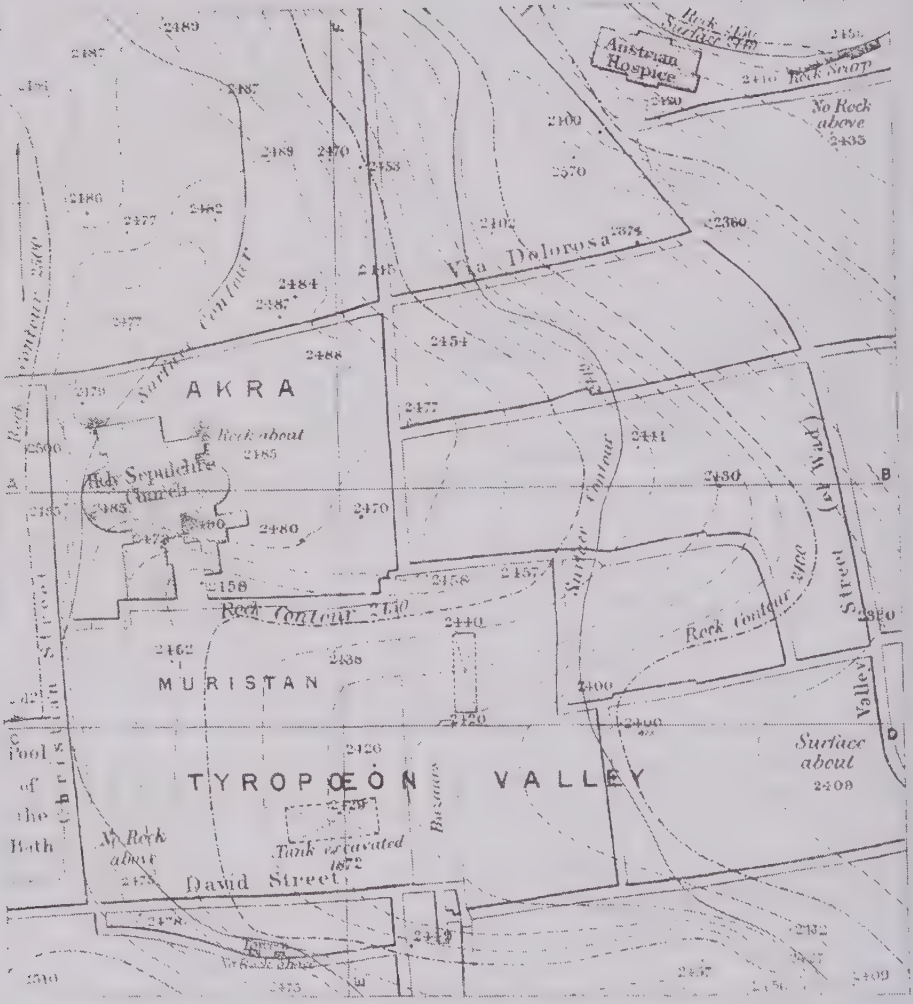
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TYROPŒON VALLEY
Via Dolorosa
Austrian Hospice
No Rock above
Rock about
Holy Sepulchre (Tombs)
Rock Contour
Surface Contour
Rock Scarp
Surface about
Tank excavated 1872
David Street
Valley Street (1st Wall)
Pool of the Bath
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floors These negative observations are often very useful in determining the *superior* limit for the rock level, though they do not of course give an *inferior* limit.

In order more clearly to show the manner in which the contours may be traced, it may be useful to follow one line across the plan The contour 2,450 feet above the sea may be taken as a good specimen, and is, in fact, the master contour of Jerusalem, running through the heart of the city from the north-east to the south-west angle

This contour first appears on the present plan in the north-east corner, where a vertical scarp 20 feet high runs parallel to the Via Dolorosa on the north side of the street. Behind the Austrian Hospice there is a steep slope (from which we may fairly infer the rock to be close to the surface), and the surface contour 2,449 limits the deviation of our rock line on the south, all the ground further south being here not more than 2,339 feet above the sea. On the north an observation occurs about 200 feet from the rock contour at a level 2,477, thus confining the contour 2,450 within a limit of about 70 feet north and south As, however, the surface slope is much gentler to the north, the limit of deviation is probably in reality less

The rock contour 2,450 reappears on the west side of the valley, which runs down south-east from the Damascus Gate, the bed of which has an accumulation of some 40 feet of *débris* above it. We have here three observations in a line east and west, showing an even fall of the rock of 36 feet in 150 feet The furthest east of the three observations has a level 2,453, thus limiting the position of our contour on the west, while on the east the surface contour 2,449 occurs at a distance about 100 feet from our rock-line, and an observation (2,402) of the rock is obtained 10 yards east again

These data practically limit the deviation of the rock contour 2,450 at this point within about 20 feet east and west, and its direction southwards is controlled between the surface contour on the east and the observations (2,455 and 2,454) near the Via Dolorosa on the west

Proceeding southwards to the street called 'Akabet et Takiyeh (the next parallel to the Via Dolorosa), we find that the surface contour 2,449 curves outwards to the east, and that an observation (2,444) west of et Takiyeh shows rock above the ground. The rock contour,

therefore, cannot here be far away from the surface contour, and its approximate direction is obtained by joining the point 2,444 with the point 2,477 at the top of the above-mentioned street, where also the rock is visible on the surface for a short distance, by dividing this distance of 350 feet proportionally (in the ratio 27 to 33), we obtain the point through which the contour should pass

The next observation, in the street south of the last, agrees with the preceding determination The rock contour is here confined between the observation 2,457 on the west, and the surface contour 2,449 on the east—an extreme limit of 100 feet, and on the supposition of a uniform slope, the limit of deviation is not greater than about 30 feet at most.

Within 50 yards of the last point the line of the contour, which here begins to deviate considerably from that of the surface contour, is fixed within a limit of about 29 feet, passing between two observations of the rock, 2,470 on the north, and 2,440 on the south, at a distance apart of about 100 feet A section of the hill-side, extending over a length of 200 feet, is here obtained by aid of the observed lie of the rock, in a great cistern discovered in 1876, showing a uniform slope of about 1 in 5, and defining in a satisfactory manner the northern slope of the great valley, now hidden beneath 50 feet of rubbish

The rock contour 2,450 now enters the area of the Muristân (the old Hospital of St John), the surface of which, before the excavations undertaken by order of the German Government had been commenced, was an open field at a level of about 2,480 feet above the sea The first observation (2,438) gives the level of the rock under the south wall of the Church of St Marie la Grande, where a rock-cut tomb (of Crusading date) was found in 1872. The next (2,462), about 100 yards further west, shows rock 15 feet below the surface In connection with these we must take the observation close to the Holy Sepulchre Church, where, in the vaults of the southern courtyard, the rock is found 15 feet from the surface (2,458) Under the belfry (2,473) it is only 7 feet from the surface, and in Mount Calvary it is 15 feet above the floor of the church (2,495), as ascertained in 1882 From these, and the other neighbouring observations, it is clear that the church stands on the hill-top, and that the ground falls rapidly south of it The contour which we are tracing therefore runs between the Holy Sepulchre Church and the south wall of

St Marie la Grande, and on the supposition of a uniform slope its position is limited to narrow bounds

It now becomes evident that the contour must again turn south, as there is an observation near the south-west angle of the Muristân of 2,478, while all the observations further west are at yet higher levels. The ancient Byzantine chapel discovered in 1840, at the corner of Christian Street and David Street, has its floor 25 feet beneath the surface, and the level of the rock seems thus to be about 2,470 in this place. On the east our contour is limited by the level of the rock in those magnificent tanks excavated in 1872-3, where the bed of the valley was laid bare to the rock at a depth 50 feet below the surface The rock was here found to be stepped down eastwards with a gentle fall, the mean level of the part measured being 2,429

Crossing David Street we obtain further indication of the rock-levels The two ancient towers which are now built into the cistern of the Jewish Mission School have their bases about 35 feet below the street East of Dr Chaplin's house there are also vaults below the street level, and at this point Colonel Warren obtained an observation (2,449) at a depth of 34 feet beneath the surface under the so-called Gennath Gate The ground at the present time falls northwards from Dr. Chaplin's house to David Street at a slope of about 1 in 14; but the fall of the rock from the so-called Gennath Gate to the great cistern in the Muristân is at a slope of 1 in 10

Following our contour eastwards from the last point (2,449), we find it controlled by another level (2,457), where the thickness of *débris* is only 12 feet The last point is 400 feet from the preceding, and between them the line is not well defined, but immediately east of the point 2,457 we find the contour line almost absolutely fixed, the surface contour again approaching it, while four observations at levels differing by nearly 50 feet, occur so close together as to give evidence of the existence of a precipitous slope or rocky scarp, which runs southwards until it becomes visible as a cliff some 20 feet high, facing the Haram opposite the south-west angle

From the detailed account of this important contour the reader will be able to judge the manner in which the other lines of level have been traced The general results may, however, be perhaps more clearly

explained by means of sections of the ground Three sections are accordingly given, one through the hill spur (east and west), a second along the valley bed (east and west), and a third across the valley and hill (north and south)

From these it will be evident that there is only a very small accumulation of *débris* on the hill-top, while the valley bed has been filled up nearly to a level with the higher ground, or to a depth of 50 feet in the middle

The surface outline in these sections is traced in accordance with the contours given on the Ordnance Survey; and, with regard to the rock outline, it should be noted that the line depends not only on the points marked *Rock*, where observations occur on the cutting line, but also on other intermediate observations near the cutting line, and thus on the rock contours of the plan

All that was known of the rock before 1872 has been already noticed in speaking of the Muristân.

In 1872 the great cistern in the south-east portion of the Muristân was excavated and the bed of the valley laid bare In 1876 the discovery of another tank north-east of the Bazaars gave a valuable confirmation to the correctness of the contour lines previously traced, and although further observations would be of great interest, the main fact of the existence of a valley some 100 feet deep and 800 feet wide (north and south) may now be considered definitely proved

It is interesting to compare our present information with the discussions of earlier writers, by whom it would have been considered invaluable In 1838 Dr Robinson described the Tyropœon Valley as commencing near the Jaffa Gate, and pointed out the fact that there was a descent northwards to David Street, from the so-called Mount Sion ('Biblical Researches,' ii 264) In 1849 Canon Williams writes, 'I never could find any traces of the valley Dr Robinson calls the Tyropœon' ('Holy City,' ii. 29) In answer to this, Dr Robinson was only able to point out the level of the old chapel of St John, 25 feet below the street ('Later Biblical Researches,' p 185)

The earliest attempt to restore on the ground the City of Jerusalem as described by Josephus, is that of Brocardus, who, writing in 1283 A.D., says of the valley under consideration, 'The ravine is now itself quite

filled up, but nevertheless shows signs of its former concavity.' Brocardus had visited Jerusalem, and possibly was aware of the existence of the great tanks subsequently filled up His description, at all events, now proves to be absolutely correct

By denying the existence of this valley, it became possible for the apologists of the traditional site of the Holy Sepulchre so to draw the line of the second wall as to pass entirely clear of the church on the east It can hardly be now supposed that the city wall can have crossed the bed of so deep and wide a valley, leaving ground at an elevation 80 feet higher, and only 100 yards to the west, on the outside The determination of the contour of the valley thus forces us to remove the line of the second wall further west, where a saddle of higher ground forms the head of the great valley

The tracing of the rock also throws light on the description which Josephus gives of the ancient city, which was rendered obscure by reason of the filling up of the valley

Josephus (5 Wars, iv 1) speaks of the Tyropœon Valley as dividing the hill Akra from that of the Upper City,* and describes Akra (which was separated from the Temple Hill by another valley) as being 'gibbous' in shape (*αμφικορτος*), or like the moon in the third quarter Nearly all authorities agree in placing Akra near the present church of the Holy Sepulchre, and the gibbous shape of the spur, on which that church stands, is rendered conspicuous by the rock contours, but is not apparent from the surface contours. It will also be observed that a flat terrace is here

* The name Tyropœon is generally supposed to be Greek, in which case it would mean 'cheese makers,' but it may be noticed that Josephus generally gives the Aramaic names in his topography, and (as in the case of Bezetha or Cœnopolis) makes special mention of any Greek translation which he may make of a native name. It was suggested by Dr H Bonar that the word Tyropœon may be Hebrew or Aramaic. Captain Conder therefore proposes to read it as צרפין from a root meaning to 'smelt,' and hence applied to money A Beth Tzeripha ביתצריפא is mentioned in the Talmud, apparently towards the east of Jerusalem, where the offal from the Temple was thrown This may also perhaps be connected with the name Tyropœon The same root occurs in the Arabic Serf, 'change' or 'silver' It seems strange that cheese-makers should reside in Jerusalem, but the Aramaic would give the natural meaning, 'Valley of Money-changers,' and in support of this view it should be noticed that part of the city immediately over this valley was called Khân es Serf as late as 1500 A D (Mejr ed Din), and that the money changers still have their shops in David Street, which runs down the Tyropœon Valley —C R C

formed with a steep slope on both the east and west (see section, A, B), and it seems possible that this marks the artificial levelling of the Akra Hill by the Hasmoneans, as twice described by Josephus.

The amount which would have been cut off, supposing the original slope to have been uniform, is about 30 feet on the average, and if, as seems not improbable, there was here originally a knoll of higher ground, the amount cut down would have been yet greater

Colonel Warren ('Temple or Tomb,' p. 33) supposes the knoll cut down by the Hasmoneans to have been about 1,000 feet south-east of the Holy Sepulchre Church, with a level 2,470. The section of the present surface rather confirms such a supposition, but at least 50 feet of rock (in height) must in this case have been removed (Cf 13 Ant vi 7, 5 Wars, iv. 1.)

The rock contours have been traced all over Jerusalem, but with exception of the Haram area, there is no part of the city where the results of a study of the original surface appear to be as interesting and instructive as in the vicinity of the Tyropœon Valley

C R C

THE

WORK OF M. CLERMONT GANNEAU.

M Clermont Ganneau was resident in Jerusalem, as Drogman-Chancelier in the French Consulate, from the year 1865 to 1872 He again went to Jerusalem in 1873-74 for the Palestine Exploration Fund, on an archæological mission, and in the year 1881-82 was French Consul at Jaffa. The work which he accomplished during these three periods of residence is of a very varied and remarkable character, principally in South-Western Palestine It is proposed in this volume to extract from his letters and reports certain portions which relate to Jerusalem itself and its immediate neighbourhood.

The Stone of Zoheleth

(1 Kings 1 9)

'Nearly in the centre of the line along which stretches the village of Siloam, there exists a rocky plateau surrounded by Arab buildings, which mask its true form and extent the western face, cut perpendicularly, slightly overhangs the valley Steps rudely cut in the rock enable one to climb it, not without difficulty, and so to penetrate directly from the valley to the midst of the village By this road, troublesome, and even dangerous, pass habitually the women of Siloam, who come to fill their vessels at the so-called "Virgin's Fount" (Ain Sitti Mariam or Umm ed Deraj) Now, this passage and the ledge of rock in which it is cut are called by the Fellahîn "Ez Zehwele" It is impossible not to be struck with the absolute identity which this name offers with that of the *stone of Zoheleth*, which the Bible (1 Kings 1 9) places near (אצל) En Rogel It is quite sufficient, in fact, to compare זחלת with Zehwele or زحويله to determine with what precision the phonetic elements correspond The vocal type itself is exactly reproduced, putting aside an insignificant inversion of the sound *O*,

which in Hebrew precedes, and in Arabic follows, the consonant ר A homogeneous transcript will present us with this identity in still clearer manner Hebrew: *Zohelet*, Arabic: *Zehoelet*

'I believe, then, that we can consider the situation of the Stone of Zoheleth definitely determined This point fixed with certainty can serve to determine the position of many others of the highest interest At present I can only indicate a few, proposing to return to the question at length at some future time For example, it becomes extremely probable that we must put *En Rogel* at the *Virgin's Fountain*, and not at *Bir Eyub* In fact, Bir Eyub is 700 metres distant from Zehwèlé, and the Pool of Siloam is 400 metres, while the Virgin's Fountain, situated exactly opposite Zehwèle, is only separated from it by the breadth of the valley, about 60 metres I call attention to the importance of this result in tracing the line separating the territories of Benjamin and Judah, which passed by En Rogel, and the support which it affords to Captain Warren's ingenious theory of the direction of this line.

'I must advance another fact which appears to me intimately connected with this remark, and to confirm it in a certain measure We know the multiplicity of denominations under which the great western valley of Jerusalem, so commonly called the Kedron, is known The Fellahin of Siloam divide it into three sections, which are, proceeding from north to south 1st, Wâdy Sitti Mariam, 2nd, Wâdy Fer'aun; 3rd, Wâdy Eyub The name of the intermediate part, which extends from the south-east angle of the Haram to the confluence at the north of Bir Eyub, is remarkable *Wady Fer'aun*, that is, *Pharaoh's Valley* Now, it is well known that to the Arabs, the name of Pharaoh simply indicates the idea of something or other of ancient times, and it is found with this vague meaning in a crowd of places which have nothing to do with Egypt, very much as in France, where all Roman camps are, for the vulgar, Cæsar's camps Wâdy Fer'aun signifies, then, the *valley of the king*, and the region to which this name is applied is precisely that which the *King's Gardens* of the Bible used to occupy *

The Tomb of Absalom

'Excavations made by me at the western face of this curious monument, on which opinions are so much divided, have enabled me to discover the base and pedestal of the columns, which are, according to the mouldings, purely Greek, the bases rest on a pedestal of 0·80 metres in height, supported, in its turn, by a kind of plinth (*socle*) more than a metre in height Further, I have completely cleared out the interior of the central chamber, which was almost filled up by the stones thrown in from time immemorial. I have thus exposed to light the two funnel arcades surmounting the slabs in which were placed the sarcophagi Three high steps cut in the rock and connected with three other steps above them enabled me to reach the original door of this monument, situated above the cornice. I have found another door, more modern, consisting of a horizontal passage in a level with the chamber, and opening to the exterior, at half the height of the monument.

'This chamber has evidently been transformed at a certain time into a place of residence, as is proved by perforations irregularly made in the walls, to admit the air and light, as well

* See Part II, under head 'Tantûr Fer'on'

as the construction of a new door. These excavations allow me to arrive at the following three important facts —1 The height, the proportion, and the true aspect of the monument; 2 A proof that the ornamentation is in Greek style, 3 The presumption that the chamber is of earlier date than the ornamentation, thus it is probable that originally a subterranean cave had been cut into the bed of the rock, into which one descended by six steps, later on this cave was isolated by these low and deep cuttings, so as to be transformed into an edifice, and the first door, opening into space, was thus generally, but wrongly, supposed to be a window

The Pool of Strouthion.

'About two years ago we explored for the first time, Captain Warren and myself, the new tunnel parallel to that which had been discovered under the establishment of the Sisters of Sion some years before The presence of rock, ascertained in several places, led us to believe that we were examining a large cistern half cut out of the rock, and half covered by two long vaults Subsequent examination has entirely confirmed this theory, and has proved that at this place existed an ancient pool or *birket*, forming a long parallelogram, cut in the rock, open to the sky, having a mean depth of four to five metres I have ascertained, by sight and touch, the existence of the rock cut vertically along nearly the whole perimeter of the parallelogram At a later epoch the reservoir was covered by the two long tunnels at present existing, in order to prevent the evaporation of the water by converting an open into a closed reservoir The intermediate wall on which the double vault rests is pierced by six large semicircular arches, forming a means of inter-communication for the two tunnels

'This reservoir, lying in a direction north-west and south east, measured about 53 metres long and 15 broad. At its south-east extremity it abuts against the rock on which rose the fortress of Antonia (the present barracks) Here is evidently the pool *Strouthion*, which it has been sought to identify with the *Birket Israîl*, or in an imaginary prolongation of it, in spite of the impossibility of taking account in this theory of the plan of attack by Titus against Antonia as given by Josephus On the other hand, my explanation makes everything clear and conformable to the rules of strategy Titus evidently attacked the north-west angle of Antonia, with this object he established an *agger* on the left of the pool *Strouthion*, and against the middle of one of its long sides, then at some distance, about the middle of the pool, a second *agger*, commanding the western side of the north-west angle of the fortress

'The comparative smallness of this pool, reserved, probably, for the wants of the fortress (Baris Antonia), might even partly account for the name *Strouthion*, which means in its simplest, and, therefore, most probable sense, a sparrow, the sparrow's pool, that is to say, the little pool, by a sort of popular *sobriquet*

'Archæological and historical considerations seem to demonstrate that the transformation of the pool Strouthion into a closed reservoir belongs to the period of Œlia Capitolina, the splendid stone-work above the double tunnel and extending as far as the Ecce Homo Arch must be contemporary, the arch itself is probably a triumphal arch erected in commemoration of the decisive victory of the Romans over Bar Cochebas

Distinctive Character of Crusading Masonry

'An observation which I made some time ago, I believe for the first time, has a certain value, because it leads to nothing less than an *almost absolutely certain diagnosis* of the stones cut by the Crusaders

'This distinction concerns not only the mediæval archæology of Palestine, but also, and almost to the same degree, the archæology of earlier times

'One knows already how little people agree respecting the age of several of the Palestine monuments, it is not rare to see contradictory theories on the subject of the same edifice, or the same part of an edifice, varying between the most diverse epochs, Hebrew, Jewish, Roman, Byzantine, Mediæval, Western, and even Arab *

'The reason of this is, that we confine ourselves usually to the examination of *forms* and *styles*, and that nothing is more deceptive than this kind of evidence when other means of identification are not at our disposal I will cite but one example One looks upon it as an established truth that every pointed arch with *normal* joints is *Arab*, and that every pointed arch with vertical joints is *Western*

'This rule, elsewhere fixed, is frequently violated in Palestine, and will assuredly mislead those who would take it for an infallible guide

'The peculiarity which I now point out enables us to decide, stone by stone, what materials were worked into any edifice by the Crusaders

'As is already known, a great number of the blocks found in the constructions erected in Palestine by the Crusaders show masons' marks, consisting of letters of the Latin alphabet, including various symbols, some of which are very characteristic (the fleur-de-lis, for example) I have collected some hundreds of examples in my notes No possible doubt would exist if each stone showed these incontestable signs, but unfortunately this is far from the case My course of observations, however, enables me to supply their absence and to arrive at the following conclusion That I believe myself able to generalize as follows "The stones bearing mediæval (Latin) letters have their exterior faces dressed, *or rather scored*, in a special manner, which of itself alone suffices to characterize them"

'This surface-dressing consists (on stones with plane surfaces) of oblique lines closely ranged, all in the same direction, done with a toothed instrument The obliquity of the lines appears generally to be at an angle of 40° to 45° This uniform line is particularly visible when the stones are illuminated by a side light I have found it on a quantity of stones without masons' marks, but employed concurrently with signs on stones in perfectly homogeneous buildings.

'Its presence is so specific that it has often led me to note masons' marks which would otherwise have escaped me, because it determines, *à priori*, the age of the stone, and warns me that, perhaps, a mason's mark is to be found

'I have noted the existence of this surface-dressing on stones of all shapes and positions blocks, in courses, in walls or pillars, voussoirs of arches, and even in rebated blocks It exists also on stones with carved surfaces placed vertically, shafts of columns, concave or convex blocks of apses, or circular walls

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* See Appendix on 'Architecture' 'Memoirs,' Vol III A dressing almost indistinguishable has been found on Arab buildings

'But in this case the cuts are very slightly oblique, and approach perceptibly to the vertical, which is the normal of the cylinder, when, on the contrary, the cylinder is disposed horizontally (as in horizontal mouldings), the lines of the cut are very nearly horizontal

'These facts are easily explained by the necessity of making the tool follow a rectilinear direction, if, for example, the same method had been followed as for plane surfaces, the tool would only have touched the carved surfaces perpendicularly to their normal, and would have produced marks only instead of lines I have remarked another group of stones also dressed obliquely, but on which the cuts are replaced by a series of dotted lines I have not yet studied this peculiarity sufficiently to say if these stones belong to the same epoch as the others

'So far I have not met with a single fact in contradiction to the broad rule which I think I am able to lay down as follows (restricting it, be it well understood, to those parts of Palestine with which I am familiar).

'All stones showing what I propose to call "the mediæval dressing" (*taille mediæval*) were worked by the Crusaders

'There is no need, I think, to insist further on the advantages which may arise in a multitude of cases from an application of this rule, reposing as it does on the result of minute observation, so to speak, on what one may consider the "epidermis" of the blocks The nature of the dressing is one of the most certain means of recognising the date of the construction," says one of the most learned architects of our time, M Viollet le Duc, in his "Dictionnaire Raisonné de l'Architecture Française"

'Besides the practical and local application which I have indicated, this fact which I have pointed out concerning the "mediæval dressing" is capable of furnishing a new element in the history of the development of Western architecture itself It is known that the dressings vary in the West according to the district and period The period being known, it would perhaps be easy to determine the original European region of the method in question, and, in consequence, to find out to what school the builders belonged who were employed by the Crusaders

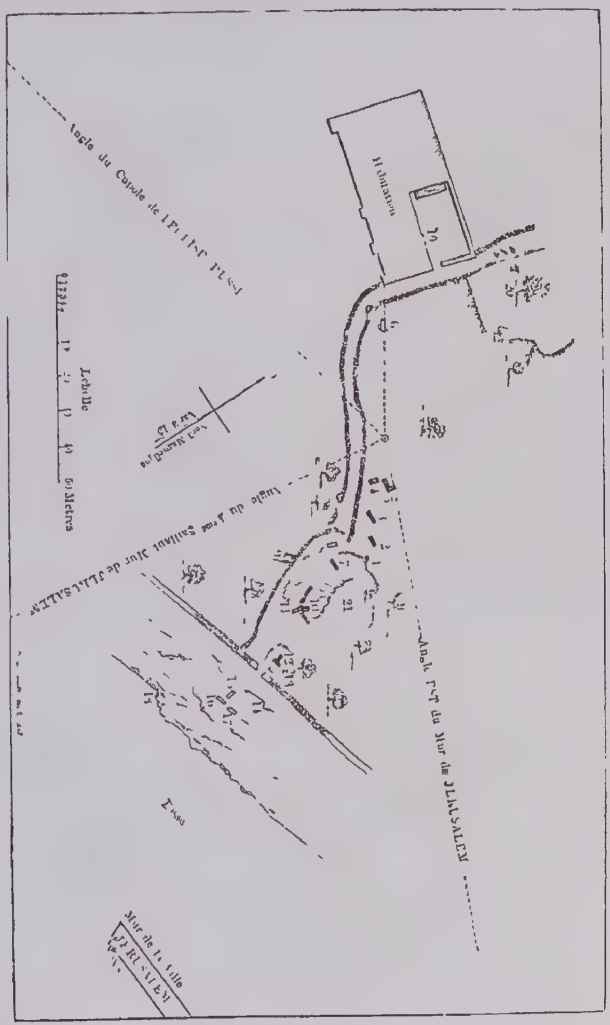
'It will not be forgotten that it was precisely in the twelfth century that (in France, at least) the different styles of dressing reached a great degree of perfection Some authors are even tempted to attribute this result to the influence of Græco-Roman art in Syria

Ancient Tombs North-east of Jerusalem.

'There is a group of rock-cut sepulchres which, so far as I know, have never been noticed They are all in a large field lying between the moat north-east of Jerusalem and the magnificent pine standing close to a winepress worked by Mohammedans, this place is generally known under the name of "Kurm esh Sheikh"* These sepulchres are interesting from a double point of view (1) in regard to their form they belong to the horizontal system of rock sepulture, the entrance consists of a rectangular trench about 1 60 m by 0 45 m, and more than a metre in depth, at the end a rebate cut in the rock appears to have been destined to receive and support a slab closing the tomb properly so-called, placed in a sepulchral chamber situated below So far as I have been able to judge of the exterior,

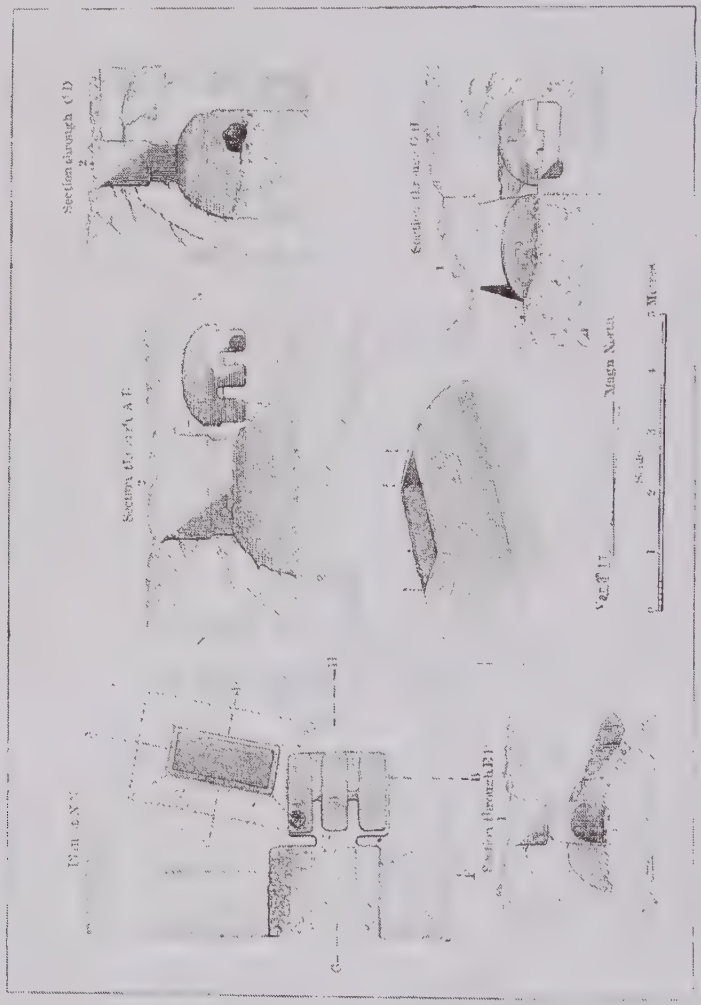
* See Part II, under head 'Kurm esh Sheikh'

these chambers are excavated in a vaulted form they appear to have a considerable extent, and the proprietor of the ground has assured me that many of them communicate There have been found in them, I am told by the proprietor, quantities of bones,



broken pottery, "boxes" in soft stone, and an ear ring in gold, which he promised to show me

'(2) The position of the sepulchres may be of importance for the question, *adhuc sub judice*, of the third wall of Jerusalem. They extend along a line of about 125 degrees, starting from the south-east angle of the building, marked close to the great pine on the



Ordnance Survey map, and running to the road which passes along the moat of the city at the north-east. We counted a dozen openings of tombs, and the last are hardly 40 metres

from the moat of the city If the examination of these tombs, which we are about to make without delay, leads us to assign them an ancient date, it is clear that the existence of a cemetery of a certain date may furnish us proofs for or against the existence of a third wall to the north of this point

'The proprietor of the ground told me that they had found another great tomb cut in the rock under the wall north east of the present building (at the south side of the little court margined on the house on the Ordnance Survey map) It appears, besides, that a tradition assigns to the Kurm esh Sheikh a *magam* of El Khadher (the prophet Elijah) I think that there must exist about here many tombs of the same kind We know that it is very near this point that the partisans of the identity of the wall of Agrippa with the modern northern wall place the Fuller's monument spoken of by Josephus

'I have, with M. Lecomte, drawn up an exact plan of the ground where these tombs lie, so as to give their position relatively to the city We have carefully noted the orientation, which differs with each Within the plot of ground which is bounded by a dry-stone wall bordering the road we counted thirteen openings, some completely open, some partially filled with earth, others which seem to have been commenced and left unfinished Opposite the gate of the enclosure, on the road itself, we also remarked traces in the scarp of the rock of three rectangular graves (belonging probably to the same system) and of a great wall On the counterscarp of the city moat there exists one other grave, which might belong to the same group.

'It is difficult to give, in a simple description, any idea of the arrangement of these tombs, which (so far as we have seen) are composed of a chamber oblong in plan, vaulted in the manner known technically as "*arc de cloître*," or "*coved* vault," formed by the direct penetration of two cylinders, whilst the vault known as "*voute d'arêtes*" (the plain *groined* vault) is obtained by the *intersection* of two cylinders Architects are well aware that the first-named system is older than the second *

'M Lecomte has added to his plan a little sketch giving the geometrical perspective of this vault. Below the springing of the vaults are vertical walls, at its summit is the opening of the grave, communicating with the exterior, and of this the bottom seems to have been closed by a big block resting on a rebate cut in the rock

'The first chamber (O) which we entered, almost entirely filled with earth, communicated by a small round opening (R) with a second chamber (P) This is very small, and contains three *loculi* cut trough fashion and parallel A hole pierced by the Arabs in one of the angles permits the visitor to penetrate to an adjoining chamber (Q), which is only separated from its neighbour by a very thin wall of rock

'This third chamber is filled with earth nearly to the springing of the vault, so that we could not discover the funereal arrangement At the top is the rectangular opening marked in the general plan (under No 2), by which this chamber opens directly to the exterior

'We visit a very curious tomb, in which, to the left on entering, one sees an "arcosolium" covering in a trough, rounded at one end, square at the other the rounded end was evidently that in which the head was, so that the feet were turned towards the entrance A second chamber, situated in the axis of the other, is ended by a

* The arrangement of these tombs, as elsewhere described in the volumes of the 'Memoirs,' is that of a shaft, with a *loculus* under an *arcosolium* on either side (See Appendix on 'Architecture,' 'Memoirs,' Vol III

"hemicycle" (or semicircular apse) I have never until now met with this singular arrangement, we shall see presently the plan and section of this sepulchre, which is unique in its way

'We shall return soon to the exploration of the other tombs, which are at present filled with mud and water I can at present give no opinion whatever on the exact age of these tombs, and my hesitation is increased by the importance of the question connected with it, and which I indicated in my last report, viz, the extension of ancient Jerusalem to the north of this point. I will only observe for the moment that in building the Latin Patriarchate there were found inside the present city, about 250 metres west of the Church of the Holy Sepulchre, tombs with sarcophagi identical with those of which I have many times spoken, and a number of lachrymatory glass vases, like those picked up by M de Saulcy at the entrance of the Kabour el Molouk, and to that found by myself in a sepulchral cave, with *fragments of Hebrew inscriptions*

'I think it would be of some interest to attempt an excavation on this spot to try to clear out one of the tombs not yet violated, perhaps one might come across something of an epigraphic character, or at least some objects which might help us to determine the period to which they belong

'One may compare the interior arrangement of the second chamber with that of a tomb described by Lieutenant Conder ("Quarterly Statement," 1873, p 22), which is close to the excavation marked No 81 on the Ordnance Survey map of Jerusalem * A little distance north of the house of the Kerm esh Sheykh is an old Arab cemetery, which appears to have been long abandoned

Cavern on the Ophel Spur.

'While exploring, some days before I fell ill, that part of Mount Zion† in the neighbourhood of the spot where, according to my calculations, the tombs of the kings of Judah should be, I remarked, about 280 English feet east of the great mulberry-tree of Silwan, situated at the south-west angle of the "Old Pool" of the O S map, a curious cavern The entrance is very narrow, but the cave, which appears to be in part cut by the hand of man, enlarges considerably, and plunges almost horizontally into the side of the hill At the end a pillar, rudely cut, supports the roof of the cavern, and I think I saw openings to other galleries Unfortunately, the interior is in great part filled with earth, so that at certain points one is obliged to creep in order to pass between the ground and the roof I undertook a small excavation in order to ascertain the extent and the direction of this cavern, above all, its extent I cut a narrow trench of no great depth, with the intention of pushing it as far as the cave extends, intending later on to cut deeper in order to reach the original bottom We were already fifteen metres from the entrance when my illness put a stop to the works The excavation has, up to the present, produced (1) considerable quantities of bones, which appear to have been thrown in pell-mell, as into a charnel house, (2) bits of broken pottery by the thousand, some of which appear very ancient, (3) a large number of fragments of

* The tomb in question, with all others like it, is suggested by Captain Conder to be Christian, and not earlier than the Byzantine period

† M Clermont Ganneau suggests that the spur north of the Pool of Siloam, generally called the Ophel Spur, is the ancient Zion

great stone vessels, worked all round in flutings and mouldings, (4) and lastly, one stone weight. I have brought away all the things indiscriminately, and we have taken out and put aside for photographing some as being worthy of attention. It is evident that all this rubbish has been designedly accumulated in the cavern. It seems to me very curious to know where this subterranean passage leads. Without assuming that it may have a connection with the Tombs of the Kings, we may suppose that it will teach us something on the topography of Zion.

Rock cut Chambers West of the Ecce Homo Church

'Among my proposed researches I pointed out certain rock-cut chambers immediately beside the rock in the Ecce Homo Church *. The presence, previously unsuspected, of these excavations in the interior of Jerusalem, and in a place which is particularly interesting as regards the topography of the Holy City, is a fact of great importance, and one of my first cares was to visit the chambers with M. Lecomte, in order to get an exact plan of them. The work, which it was desirable should be accurate, was rendered difficult by the complication of modern houses placed at different levels, and leaning on the flank of Bezetha, so as to mask the general direction and particular aspect. We met with an excellent reception from the residents of the houses—Arabs of Greek religion—and every facility for accomplishing our task. The work was nearly finished, and there only remained a last visit to be made to take certain measurements, when an unforeseen accident put an end to our examinations. The very day when we were to return, an hour before our arrival, the house, an old tumbledown ruin, saturated with the heavy rains, suddenly fell down. We found nothing but a mountain of *débris*, completely barring the Via Dolorosa. We had had a narrow escape. An hour later and we should have been in the cellars of the house, and in all probability there would have been an end of all our archæological labours. Fortunately the house was uninhabited. The worthy people next door escaped with no worse injury than a fright. They had, however, to decamp immediately, their own house appearing desirous of following its neighbour's example, so that it was judged expedient to anticipate its wish and pull it down at once. This unfortunate *contretemps* leaves us with an unfinished plan on our hands, and I fear they will pile up the fallen stones in such a way as to hinder access to the chambers. Anyhow, the essential part of the work is done, and the plan, such as it is, very minute, so far as it goes, gives a good idea of the place.

'The following notes will serve to some extent to describe what we found —

'You know the escarpment of rock (O. S., No. 72) in the Ecce Homo Church, forming, with a length of several metres, part of the northern wall of the church. The escarpment suddenly stops, interrupted by the houses which rise west of the church, and which line the Via Dolorosa as far as the garden of the Austrian Hospice. It is behind these houses (there are three) that I found and marked the rock forming a continuation to this escarpment, about 25 metres in length. Proceeding from east to west, in the first house is observed a piece of rock in nearly the same line as the escarpment of the church. The wall makes almost directly an obtuse-angled bend to the north-west, and gets buried among buildings where it cannot be followed. The presence of the rock up to this point is noted by Tobler ("Dritte

* Some of these chambers had been previously mentioned by Dr. T. Tobler ('Dritte Wanderung')

Wanderung," p 249) Passing into the next house, we find the rock with its general direction to the west (slightly southing), with a length of about 12 metres Arrived at this point, the rock offers a peculiarity of double interest to the archæologist and topographer In the vertical wall is cut a corridor, winding at first, which plunges into the masonry and takes a north-west direction It divides in two my first chamber, irregularly cut in the living rock, with flat ceiling, flanked right and left by two broad stone benches, measuring nearly 2 20 by 2 40 metres After this it immediately abuts on a second chamber also cut in the rock about 3 by 3 metres, with irregular angles A space opening out in the wall north of this chamber loses itself in the earth and masonry. In the last wall is indicated a doorway whose framework has given way, the upper part alone is pierced, and gives access to a little alcove, which seems an unfinished chamber In the south wall two doors have been opened similarly with fallen-in framework, one of which communicates with the first chamber already described, and the other debouches into a third chamber cut in the rock, with a complicated arrangement of benches This is not all On the lower floor—the cellar, so to speak, of the house—the same wall of rock is perceived descending below the actual level of the street A broad bay forming a vestibule is cut in it, and gives access to a group of chambers also cut in the rock, extending in a north-west direction under the chambers above, with which they communicate by means of a hole

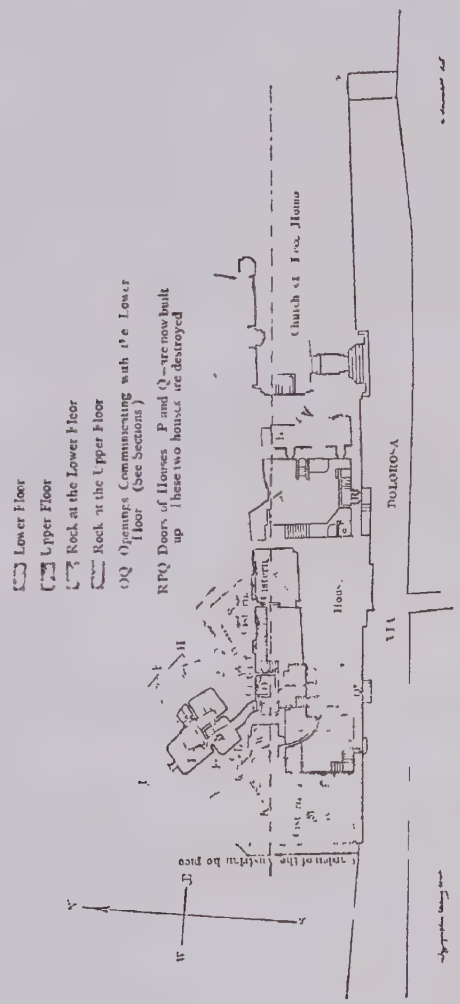
'Lastly, in the third house near this, the rock is found again, at the end of the lower caves or chambers, it has been cut in the same way, and appears to have been cloven by an earthquake Immediately beyond is the partition wall separating this last house from the garden of the Austrian Hospice

'The exploration of these lower regions was not by any means easy or pleasant, on account of the mass of filth and rubbish piled up nearly to the roof in the rock cut chambers, over which we had to clamber and creep, one room in which we were obliged to remain several hours was a mere receptacle of sewage, though fortunately disused for some time. However, temporary uneasiness is forgotten in thinking how nearly this wretched place was becoming our tomb

'Cisterns made at different points along this line of the rock have been sounded by us, and have given depths which show that the rock extends several metres below the level at which it ceases to be visible This line is at a mean distance of about 9 metres at the back and north of the Via Dolorosa It is more than probable that it is directly connected with the rock which was observed in the construction of the Austrian Hospice, at the north-east angle of the actual building There also is found a rock cut chamber which Tobler ("Dritte Wanderung," pp. 244, 245) is tempted to consider as a stable of great antiquity It is difficult for one to pronounce on the destination of this chamber, now transformed into a cistern and consequently inaccessible, but I am sure, and M Lecomte entirely agrees with me, that the chambers visited and noted by us have not been cut for any such purpose as a stable, the only doubt is whether to call them chambers for the living or for the dead The latter destination appears much more probable, and in this case it is unnecessary to point out that sepulchres cut in a place situated more than 250 metres south of the north wall of the present city, and at a few metres only from the Tower of Antonia, must necessarily go back to a remote antiquity, and bring us to the time of the Jebusites, or at least to a period which precedes the reign of Herod Agrippa

'The people of the house reported to us that, according to an ancient tradition, there was formerly in one of the higher chambers, into which there is an entrance by the passage

described above, a chapel dedicated to St John the Baptist (Mar Hanna el m'a moŭdany) I do not know what foundation this legend may have It is not impossible that at some time or other one of these chambers was converted into a little chapel, if so, the little alcove


Lower Floor
Upper Floor
Rock at the Lower Floor
Rock at the Upper Floor
OQ Openings Communicating with the Lower Floor (see Sections)
RPQ Doors of Houses P and Q—are now built up These two houses are destroyed
Church of Free Home
DOLOROSA
House
Position of the Western Door Place

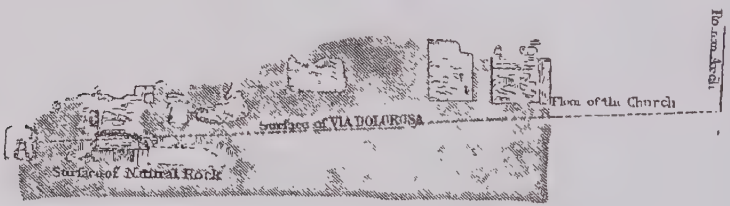
spoken of above would certainly serve as a small apse It appears that some years ago ancient coins were found in the square opening cut at the end of the second chamber'

'We can now forward you the plans and sections of the rock-cut chambers near the Dece

Homo Arch The complicated arrangement of the chambers, and the accident which for some time kept us from getting access to them, has retarded the preparation of the plans.

'I have considered, in connection with this subject, the rock which is visible at the Church of the Ecce Homo, already known, because it has an intimate relation to the position of the well observed by us We have thus a full development of the rocks in a line nearly 42 metres in length If we consider this line generally on my plan, we observe that it lies in a direction sensibly constant, only at about the middle of its course it makes a sharp turn at an obtuse angle, after which it resumes its original orientation This is important, because the line has been cut nearly everywhere with the pickaxe, and is not a natural formation This cutting is most visible in the Ecce Homo Church, and is found again in the rock of the house R, and in that of the adjacent houses Q and R'. In the house Q it seems now that the cutting has suppressed one of the walls of the chamber cut in the rock S This result is a valuable indication for the date of this chamber, and the group of those of which it forms a part, a date anterior to the period of the cutting of the rock (The vestibule Y has undergone a similar excision)

'If, now, we turn to the general section, and particularly to the small section, we may easily follow the slope of the rock from east to west in the direction of the slope of the street



The passage, which now debouches into space, might originally have opened upon a layer of rock which has now disappeared, owing to the same cause which has destroyed a wall in one of the chambers.

'Another general remark The normal axes of the chambers and the direction of the passage form acute and obtuse angles with the present face of the rock, which could not originally exist, for it would be contrary to all known usage up to the present day in that kind of excavation

'We have undertaken two excavations

'The first, in the chambers cut in the rock between the Austrian Hospice and the church of the Ecce Homo I at first tried to push myself into the opening I, at the end of the chamber P, hoping to arrive at another chamber, or at a primitive entrance. I had to force my way in the midst of a mass of rolling stones, which shook at every movement. After two days of stubborn as well as dangerous work, we were obliged to give it up We have, however, meanwhile, succeeded in seeing and touching to right and left two *vertical walls of rock*, at right angles, the angle being about 1 metre from the opening These two walls may belong to a chamber like that lettered P, but they may also be the walls of a vestibule, whose sides were cut in the rock, and which was open to the sky In favour of this hypothesis, the ground of the passage I, above the surface of the chamber P, is on a

level with that of the region X, still to explore, an arrangement which applies better to the entrance of a tomb than to a simple communication between two chambers Besides, the enormous mass of stones, against which we have vainly endeavoured to struggle, implies the existence of a hollow much higher than a single chamber. Either this chamber has lately given way, or else it was always open to the sky.

'The second excavation is in the Armenian ground (27 O S) Captain Warren has already made an excavation on this side in the Street of the Valley (March, 1869) The point that I have chosen is 60 metres more to the east, at the lowest point of the ground. One shaft is already 5 metres deep I propose to open a shaft to the south south-east, in order to cut the probable line of the second wall'

'In the passage on the left may be remarked a broad "notch," apparently indicating that the workman wanted to rectify the sinuosity of the passage. The square opening made at the end of the chamber P seems to communicate with another chamber filled with earth, which I should very much like to dig It is a question whether this opening is not the original entrance to the cave, and whether a passage has not been cut afterwards from the inside, to attach the chamber V directly with the exterior I must add that the conjecture is rendered difficult by the configuration of the ground, as one makes it out, the chamber appearing to plunge into the depth of the hill On this hypothesis, we should have to admit that the chamber P communicates with another chamber by the square hole, and that the chamber filled with earth had its entrance communicating with the exterior by the west face In that case, the real primitive entrance of the group of chambers would have to be sought to the east of the Austrian Hospice, near the second A in the word Mahometan in the O S. map We may, in fact, admit, without too much temerity, that the side of the hill turns and faces the west All this, however, is purely conjectural

'If we pass to the examination of the lower chambers, we shall make the following notes The people of the house told us that the chamber Q was provided with a bench cut in the rock, it is impossible to ascertain the fact now, as the place is filled with debris to the ceiling The wall of rock, which we saw in the third house, appears to be in the alignment of the extremity of the rock of the neighbouring house, Q, there is, between the two, a solution of continuity of only a few metres

'In this third house the rock had been also excavated to make a chamber, partly destroyed A piece of the ceiling of this chamber has fallen (section K L) through some movement of the ground overloaded with houses, or an earthquake Most likely the latter was the cause, for the wall of the chamber is cloven vertically

'If now we search for the origin of this rock-work and the period at which it was effected, we are reminded of what Josephus says about the fortress Antonia, *which was separated from the Hill Bezetha*, not only naturally, but *by means of a deep ditch cut so that the foundations of Antonia were not at the foot of the hill and, therefore, easy of access* The same historian informs us, besides, that the second wall, starting from the Gennath Gate, joined Antonia, only circumscribing the northern region.

'The second wall, then, evidently starting from Antonia, must have been directed to the west, and turned its face to the north Now, during the first part, it was exposed to the same inconveniences as Antonia in being commanded by Bezetha To the same evil the same remedy was applied—the rock was cut, or the moat of Antonia extended Can we not see in the face of the rock cut by the pickaxe, which we found behind the houses, the counter-scarp of the prolonged moat, cut to protect, not Antonia, but the second wall? It was not

necessary to prolong the moat beyond the point where is now the eastern wall of the garden of the Austrian Hospice, for at this point the base of Bezetha seems, according to our observations, to turn to the north, forming one of the sides of the great valley from the Damascus Gate, which the second wall must necessarily have crossed In the eastern flank of this valley were excavated chambers, belonging, perhaps, to a cemetery, of which those chambers found by us formed a portion. In that case these chambers, cut across by the moat and consequently older than it, were probably more ancient than the building of the second wall

'These facts are of extreme importance in helping us to find the second wall; it seems to me that it must have passed between the two streets called "Tarik as Serai al Kadim" and "Daraj as Serai" in the Ordnance Survey map Now all the west part of this place is occupied by a large space of ground belonging to the Catholic Armenians, where I believe I could easily obtain permission to dig Captain Warren has already sunk a shaft on this side in the street Haret el Wad, without results, but possibly he missed the wall by some few metres.'

The Haram and the Dome of the Rock.

'In one of my recent visits to the Haram, I remarked that in one or two places they had taken away some of the slabs covering the ground within the Kubbet es Sakhra (1) before the gate of the cave, (2) before the eastern gate called Bab en Neby Daoud Ascertaining that on Saturday last they were going to dig at the second point, I went on that day to the Mosque, but unfortunately too late, the excavation, insignificant (0 30 metre) in dimensions, was already finished and the hole filled up Vexed at losing an opportunity which might never occur again, I succeeded in my entreaties that the excavation should be begun over again before my eyes I chose a point different from the first, trying to get as near as possible to the rock. We attacked the soil again, 0 50 metre, south-south-east of the angle of the south pillar placed between the eastern gate and the first circle of columns and pillars which surrounds the Sakhra

'The excavation was pushed to a total depth of 0 90 metre, not counting the thickness of the upper slab After a layer (0·30 metre) composed of greyish earth, mixed with stones and fragments of marble, a bed of cement was reached extremely compact and about 0 07 metre in thickness, the material was very hard, and the pick struck fire against the fragments of stone which were mixed up with it I gathered a specimen of this cement, which is grey in colour, and seems, like the Arabic cements, to be mixed with cinders and charcoal.

'Immediately beneath this layer appears the red earth, the same as is to be seen in Jerusalem and its environs, in those places where there have been few inhabitants. We excavated in this earth for 0 33 metre more, till it was impossible to go any lower without making a regular excavation and exciting susceptibilities The conclusions to be drawn from this little sounding are these (1) There is no rock 0·90 metre below the surface at the point of examination, which might have been guessed beforehand, as, judging from the Sakhra itself, the rock must have about here a general inclination of west to east (2) The existence of a layer of earth almost untouched. (3) Immediately above this earth a bed of cement, forming the general substratum of the edifice, and apparently of Arabic origin. (4) A layer of earth between this and the surface slabs.

'A number of Arabic texts, *neskhi*, flourishes, are daily being discovered in the interior of the Sakhra during the course of the works, many of these inscriptions are on plaques of marble which have been used in covering up the interior walls of the edifice, the bases of columns, sides of pillars, etc Many of these texts are interesting from an epigraphic point of view, or for the history of the Haram They prove in any case how many successive alterations the Mosque has undergone Not only are these ancient materials which have been used in the first construction, there are also anterior Arabic materials used for subsequent modifications and alterations Among these texts I remarked very fair specimens of Karmatic writing one in *neskhi* contains a part of the Sourah of the Koran called El Koursi, and the mention of a work executed by the orders of an Emir Zeyn ed Din, son of Aly, son of Abdallah, about the year 500 of the Hegira

'We have been several times to the Mosque to study the bases of its pillars and columns uncovered, and the famous semicircular arcading of the external wall M Lecomte has made detailed drawings of our observations, which will reach you with this report An important fact has been revealed by the fall of certain mosaics It is the existence of a string course in stone in the interior, and nearly in the middle of the drum which supports the cupola The profile of this string course appeared to M Lecomte to resemble a mediæval profile of the twelfth century. Here is a new element which appears now only to complicate still more the already obscure problem of the origin of the actual monument *

'As for the semicircular arcade of the external wall, it is still very difficult to pronounce upon it Up to the present, however, two things are quite certain (1) The absence of the mediæval dressing on the blocks entering into the construction of the wall and the arches, (2) the existence on one of the blocks of a mason's mark of undetermined period, having this form ≶ It is on the second pier left of the west door, and the third course above the leaden roofing

'A work is about to be undertaken in the Haram, which I shall follow with the greatest attention There has been found, it is said, in the wall of the Haram, an Arabic inscription, which states that by digging at the place where it was written a great quantity of stones will be found which will serve for repairs or reconstructions. Three years ago, following this indication, they sunk a shaft of some depth, since covered up, but which I have seen open. This excavation led to no result The new director (*mémoûr*) sent from Constantinople to superintend all the Haram works is about to reopen this shaft The work, in the Haram itself, may be of the greatest importance, and I shall follow it with the greatest care possible. The point chosen is a little south of bench mark 2387 7 of the Ordnance Survey map

'The inscription spoken of above is on the exterior of the eastern wall at the height of the loopholes (second course, counting the battlements), about 133 metres north of the south east angle Observe that at this place is a very sensible break in the continuity of the Arab wall, seeming to indicate a later repair, the line of junction is oblique, descending from south to north at an angle of about 45° The inscription is as follows "In this place are stones buried for the use of the Haram esh Sherif"

'The writing is of the kind called *sulus* The text presents in construction and orthography certain faults which seem to indicate a Turkish hand It may be that this text was contemporary with the works executed in the reign of the Sultan Selim, who repaired the

* See paper on 'Architectural History of Jerusalem' as to Crusading work in the Dome of the Rock

ramparts of the city The first excavation undertaken under Kondret Bey on these indications had been placed immediately behind the inscription The *mémoûr* proposes to open it a little farther to the north, and, if necessary, to push a trench parallel to the wall According to Captain Warren's map, we ought to light on the rock at a depth of about 10 metres It remains to be seen whether the inscription is in its original place

'On going back to the Haram we examined a very fine base placed near the entrance of the magazine close to El Aksa, at the east The lower face is entirely covered by a beautiful Arabic inscription in relief, the meaning of which I made out at once, to the great astonishment of my Mussulman companions It relates the restoration or construction of a surrounding wall (*soûr*) of the city, or Haram, under the reign of the Sultan el Melik el Mansour seif ed dîn Kilaoun es sâléhy This Sultan, seventh king of the Mameluke dynasty of the Bahartes, reigned from 678 to 698 of the Hegira (1279—1290 A D)

'The Arabic historian of Jerusalem, Mejir ed Dîn, mentions among the works executed by order of this Sultan, A H 678, the reconstruction of the "roof" of the Mesjid el Aksa, on the south-west side, near the Mosque of the Prophets. Such, in fact, states the Arabic text published at Cairo It is evident that the editors have made the mistake of writing *sagaf* for *sour*, *roof* for *wall* This is clear (1) from the possible confusion of these two words in Arabic writing, (2) from the impossibility of speaking of the *roof* of the Mesjid el Aksa, the phrase meaning the whole Haram, (3) from the inscription which I have just quoted

'Between the El Aksa and the Sakhra I observed, at the foot of the south staircase which leads to the platform, on the left, a fragment of a moulding with the mediæval dressing strongly marked This *morceau*, which M Lecomte will sketch on the first opportunity, is extremely interesting, because it furnishes us with a moulding belonging without possible doubt to the period of the Crusades, further specimens of which we shall doubtless find in edifices of date hitherto undetermined In the barrack wall I have found another, of which also we shall take a drawing

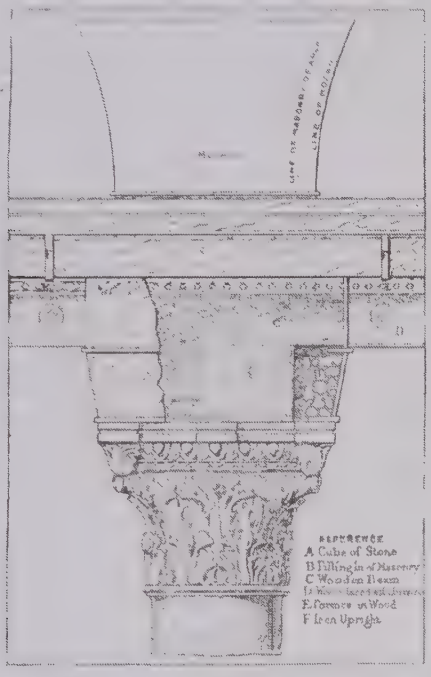
'We have at length been enabled to examine closely the base of the arches hitherto hidden by a casing of marble, over the columns of the intermediary peristyle of the Kubbet es Sakhra One of the external faces was stripped, and we obtained leave to mount a ladder and examine the capital closely You will have a drawing of it, meantime here are a few words of description which will give an idea of the arrangement, to the knowledge of which archæologists attach great importance

'The capital of the column is surmounted by a cubical abacus, over which passes the beam which runs all round the edifice. This beam consisted of two pieces of wood, clamped by a dovetailed coupling The point of junction is in the middle of the abacus Upon the beam rest the abutments of the arches It is evident that this part of the beam, now masked by the marble casing, was originally intended to be seen, because we found the ornamentation of the beam continuing under the marble As for the abacus, it seems clear that it was always intended to be covered with some kind of ornamentation, for its bare surface and its rudeness would have made a disagreeable contrast with the richness of the general decoration.

'As for the presence of the beam passing over the capitals, one can only remember the classical fact not long since mentioned by M de Vogué, in these terms.—"The presence of the wooden tiebeam is characteristic . . it appears to be of Arab invention, for it is found in the greater number of early mosques, such as the Mosque of Amrou at Cairo, and the Mosque el Aksa, and has never been found, so far as I know, in any church of the fifth or

sixth century." We have now to see what is hidden by the marble casing which surmounts the column of the interior perimeter. I hope to obtain equal facilities in this investigation.

'It may be interesting to note here an observation that I have recently made, and which I have never seen anywhere else. The scaffolding now erected within the Kubbet es Sakhra has enabled me to examine closely the mosaics ornamenting the walls. I have ascertained that on many of the vertical walls in the interior of the Kubbet es Sakhra, the coloured and gilded little cubes of glass which produce together so marvellous an effect are not sunk in the walls so that their faces are vertical, but are placed obliquely, so that the faces make an



CAPITAL IN THE KUBBET ES SAKHRA.

angle with the walls. This ingenious inclination is evidently intended to present their many-coloured facets at the most effective angle of incidence to the eye below. Such is the simple secret which produces the dazzling and magical effect of this decoration. Curiously, the same method has been followed in the construction of the splendid windows of the edifice. They consist of plaster cut into charming designs; in the holes so formed are fixed small pieces of coloured glass, arranged with exquisite taste. I have been able to examine a fragment of one of the window frames, and I observed that all these bits of glass are inserted obliquely, and not vertically, so as to overhang and meet the eye of the visitor at right angles, whence this charming brightness of colour. Perhaps this arrangement of the mosaics belongs to a

certain known epoch, perhaps to the time of the construction of the windows, *i.e.*, the sixteenth century

'At last we are able to send you the results of our examination of the balustrade of the Kubbet es Sakhra, and of a certain number of the bases belonging to the columns of the edifice This work has cost a great deal of time, and has been necessarily delayed We have at least the satisfaction of forwarding precise and definite information on these important parts of the mosque, only recently discovered and already beginning to disappear. With the photograph you have already received, and the five plates sent with this containing M Lecomte's drawings, you will be able to attack with profit the interesting questions raised by these unlooked-for facts, facts which may throw precious light upon the much disputed origin of this monument

'During the course of the repairs several columns of the intermediate peristyle of the Kubbet es Sakhra have been laid bare by the removal of the marble casing which covered up the bases One of these columns has even had its abacus partially exposed, as I stated in my previous report

'By reference to Plate 2 of the Ordnance Survey the positions of the columns examined can be easily ascertained A, column south of the south-east face, B, column north of the same face, C, column south of the east face, E, column north of the same face, F, column north of the north east face, I, column of the south face, represents a column and a base, having already undergone a restoration which will very soon cover up all the preceding

'The other bases of the intermediary peristyle have not yet been stripped of their old covering, as to that of the interior perimeter, none has yet been touched We wait impatiently for the moment when they will undergo this operation.

'A glance at the drawings will show the form of their bases better than any description. It suffices to show one positive fact that they are heterogeneous We cannot certainly deny that there is a great resemblance in the profiles A, B, C, if we only consider form, but the proportions, sensibly different for each of these three bases, do not permit us to refer them to a single type Besides, they vary in every case absolutely from the base E, as much in the dimensions as in the dispositions of the mouldings Finally, the marble in which they are cut is not of the same kind for each

'The aspect of the bases fully confirms what the variety of modules in the columns above them might teach us—the opinion of those who see in the primitive building ancient materials from various sources used over again This use, which seems very improbable in an ancient work, even of late period, is on the contrary quite in accordance with Arab customs It is clear that if the bases and columns, whatever their absolute age, had been specially made for the Kubbet es Sakhra, they would all be alike The builders would have no interest in seeking for the absence of symmetry, which shows itself not only in the variation of profile in the bases, but also in differences of thickness and height in the shafts No caprice, no supposed intention, can account for the last and grave irregularity which the sketches show. It was so striking that it fully justifies the adaptation of these false bases, which are at least regular, formed of marble slabs, it is very probable that from the very beginning the deformities of the halting columns had been disguised by this dress of marble, and that this remedy is as old as the evil The value of this fact is proved when one reflects that these bases and these heteroclite columns support a wall ornamented with mosaics, dated from the year 72 of the Hegira (A D 691), that is, the very year of the first construction of the Arab edifice

'To complete this group of bases, M Lecomte has made notes of three others, which are found outside the building, to the right of the east and north porches (the gate Neby Daoud, and that of Paradise) We know that these porches have been added to the building, and are not an integral part of it Consequently, we cannot draw any conclusions, in the sense of the preceding, from the aspect of these bases Nevertheless, they deserve, by their singularity, to be brought to the attention of architects

'G is on the north side, and H on the south of the eastern gate (Ordnance Survey, Plate II.)

'D is on the west side of the north floor

'They are in one block, and show a bastard profile, formed by mouldings, which are complicated and do not belong to any determined category They present one curious detail, on which M Lecomte rightly insists, because it may put us on the path of their origin The higher part of the base surmounting the pedestal has one of its faces lightly curved, as the sketch of the base G shows, in which the torus projects beyond the vertical face of the plinth. These bases, although different in detail, appear to belong to one building, and the same part of the building, perhaps circular.

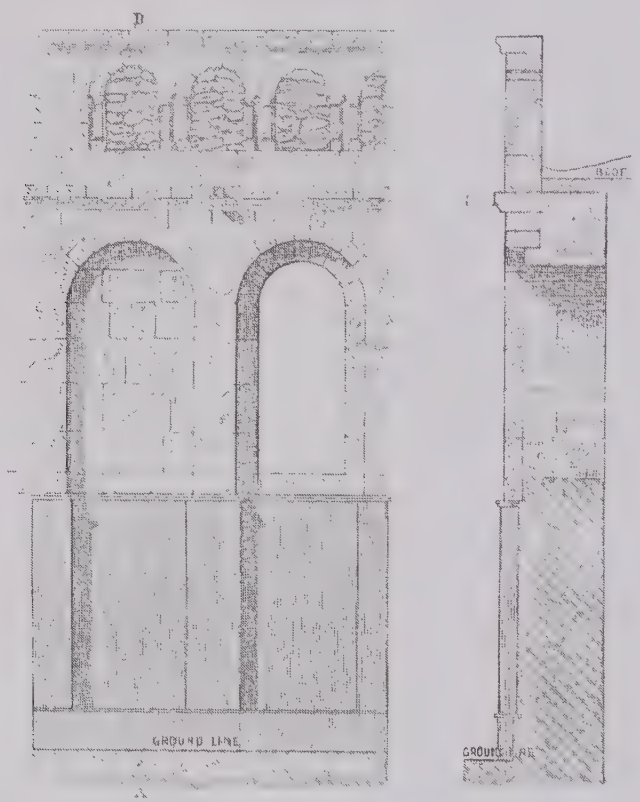
'M Lecomte's elevation on the scale of 1-100 shows two of the sides of the octagon, the west and the south west. At the right extremity of the south-west side has been shown a portion of the tile covering, to show the way in which this interesting and unsuspected arrangement was masked If we begin by studying this latter face, we shall remark that the wall is pierced by seven high and narrow semicircular arches (a fact already known), of which the upper half forms the bay of the windows lighting the interior The lower half is solid, and covered with a plating of marble, the bays of the two arches at the extremities are blind, and not blinded, as the arrangement shows Above the great arches runs a projecting band, which gives passage to six leaden gargoyles, by which the rain-water runs out above the six piers This band is surmounted by a high course, which supports a series of small semicircular arches, resting on *colonnettes* grouped two and two

'These arches, of which there are thirteen on each of the two sides seen, have been closed *subsequently* to their construction In fact, (1) the side of the wall which fills them up is in the same plane as the general face of the wall and the cutting of the capitals of the columns; (2) the columns are in fact part covered up by the filling in, (3) the filling in is effected by stones quite different from the rest of the building, (4) one of the arches in the west front has been opened, and has given evidence that it was originally destined to be always so

'Lastly, immediately above the little arcades, at a tangent to their extrados, runs a terminal cornice, the profile of which is extremely difficult to restore, so much has it suffered

'The western face shows the same arrangement We remark only that the last of the higher arches on the right extremity has been opened during the works, and that the great central arch which serves as the door is broader than the six other arches This breadth has been secured by the narrowing of the bays, the breadth of the piers remaining sensibly the same The proportions of the higher arches remaining unaltered, there results a general difference between the west and the south-west faces, in the latter the higher arches are calculated in such a manner that their axis, two by two, corresponds with the axis of the arches below, if we count 1, 3, 5, 7, 9, 11, 13, with the axis of the piers if we count 2, 4, 6, 8, 10, 12 In the west face, on the other hand, this correspondence does not exist.

'The drawing represents in stippling the projection of the porch, which is supposed to have been taken away to show the original entrance. The surface of the blocks of the whole construction has a good deal suffered. It is, besides, covered with holes, serving to fix the casing which covered it. As a result, the dressing (tool marks) has almost wholly disappeared; we have, however, been able to ascertain that the dressing is not that which I have shown to be mediæval. The only lapidary sign which we have noticed is engraved on the third



course of stones, below the left abutment of the third great arch of the western face, starting from the left. It is, as may be seen from the copy of it in Plate 28, too indeterminate in form to permit us to attach it to one epoch rather than another.

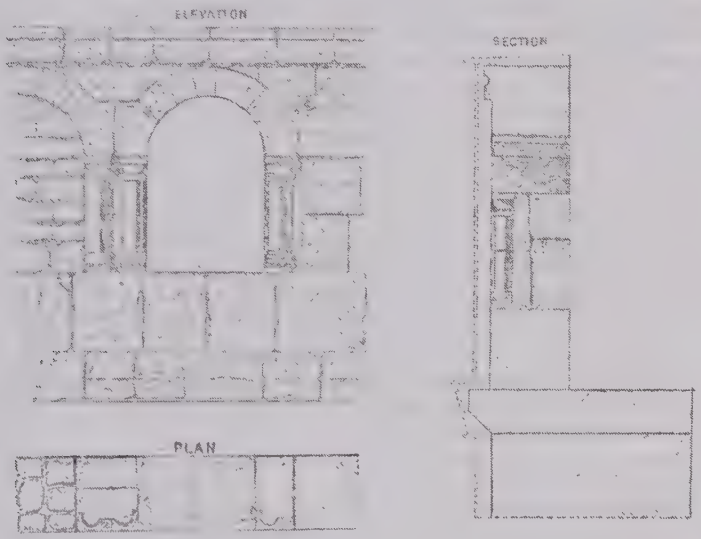
'It is more than probable that the six other faces of the octagonal wall, still concealed by the tiles, would show exactly the same respective disposition as these two, if they were also stripped.

'Starting from the band, the wall in which the higher arches are built is much less thick than the great wall on which it rests; this appears to indicate that it has originally been treated as a lighter construction, not having so much to support.

'The existence of these arches running all round the monument reveals to us a previous state very different to the present aspect, and raises curious historical questions.

'Above all, we should take account of two essential facts: (1) the arches are semicircular; (2) they were originally destined to remain open.

'This fact established, if we try to determine the date of this building exclusively by the aid of technical considerations, we shall be much embarrassed. We may nevertheless hold for certain that the whole wall, from the higher arches *to the half of the lower arches*—that is to say, in the whole of its height which has been exposed—is, in spite of the differences of



thickness, of homogeneous construction, and can have only one date. As for the part below, it is difficult to pronounce. The casing of marble hides the true wall, except at the right feet of the gate of the western face, where it seems to show that the wall is entirely the same from the top to the bottom.

'Besides the absolute age of the construction, it remains to fix the period of the transformation which it subsequently underwent, and which led to the stopping up of the upper arches. It is evident that the transformation is at least contemporaneous with the decoration of the monument by means of the tiles placed upon the wall: the beautiful *sourate* of the Koran (Yasin) in white letters on a blue ground, which runs all round the eight faces of the

first application of them in the sixteenth century It is easy to understand that the decorators in trying to get as large a surface as possible to cover with their enamelled tiles, thought of gaining this surface at the expense of these closed arches, which had perhaps a long time before lost their *natural use*, and which were treated as a higher prolongation of the wall *

'What was this natural use? To answer this question we must go back six centuries, to the time of the Latin kingdom of Jerusalem We have several descriptions of the Templum Domini, made by contemporary authors Among these descriptions there are none more exact and more detailed than that of John of Wirzburg Unfortunately, I have not with me the original text, and I quote from the partial translations of Tobler and De Vogue the following important passage "Between the external wall (pierced by four doors and by windows) . . and the interior columns (12+4) supporting the interior wall, less broad, higher, and pierced by twelve windows, there is a row of sixteen columns and eight pillars This circle of columns supports a roof which joins the interior to the exterior wall, and a ceiling ornamented with beautiful *caissons The roof is surrounded by a continuous gallery, with pipes of lead to carry off the rain water*' This description applies admirably to the monument in its present state, and proves how few were the essential modifications which the Kubbet es Sakhra has undergone since it ceased to be the Templum Domini

'As to the valuable detail which terminates the description of John of Wirzburg, it appears to me to exactly correspond with the description brought to light by the repairs Here is Tobler's translation, in his own words "Am unterm Dache war ein Rundgang zum Lustwandel und bleierne Rohren schenkten das Regenwasser aus" The lower roof is that properly so called in opposition to the cupola, the "Rundgang zum Lustwandel" is a gallery running round

'There is no possible doubt our arches are nothing else than a little portico surrounding this gallery, the inclined roof would, at its lower end, approach the horizontal, or, at least, stop suddenly to permit a passage, which would not need to be very broad The breadth of the lower wall (1 metre) is of itself sufficient A spout and leaden pipes, corresponding with the present gargoyles, would suffice for the rain-water to pass away.

'A man standing upright in the internal wall is just able to look without by the bays of these arches, whose height, measured from the summit of the arch to the base represented by the great wall, is at least 2 metres

'It is not necessary to remark how this explanation accounts for the existence, and justifies the utility of this little portico, which, later on, closed and transformed into a wall, seemed to have no reason at all for existence, and gave to the eight faces of the octagon the unpleasing appearance of eight panels cut out in cardboard. Unfortunately, the repairs follow the same error, and this light colonnade, exposed for one moment, will again be transformed into a massive wall, this time not even having the excuse of bearing the elegant fayence of Soliman

'Henceforth we may hold for certain that such was the disposition of the Templum Domini I will add that we may see a vague but real confirmation in the reproduction of this edifice which figures on the seal of the Templars, there are clearly to be distinguished two rows of bays superposed

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* As to the date of this wall, see the paper on the 'Architectural History of Jerusalem'

'This gallery, adorned with porticos still in use at the time of the Crusaders, the traces of which are now wholly lost—did it exist before their time? I think that we may, without hesitation, reply that it did, for plenty of reasons: the absence of mediæval dressing, the use of the semicircle, the historical certainty that the Crusaders had never interfered with the work, as a whole, of the Kubbet es Sakhra, the homogeneous nature of the arcade and the wall which supports it

'To these general reasons one more precise may be added. A Persian author, Nasir ibn Khosrou, who visited the Kubbet es Sakhra in the year 438 of the Hegira, that is to say, some years before the first Crusade, describing the exterior wall of the Kubbet, says that it was 20 "yards" high and 33 long, on each side of the octagon. I have not the original here, and forget what was the exact measure called by the English translator, Major A. R. Fuller, a yard, consequently I do not know the real dimensions expressed by the author. At any rate, the proportion of heighth to breadth was as 20 : 33. Now these dimensions are actually 12 and 27 metres. In order that the ratio of Nasir's dimensions should be as 1 : 2, there wants 7-66ths; in order that the ratio of the actual dimensions should be as 1 : 2, there wants 1-18. Now, the difference between 1-18 and 7-66 is only 5-99, a difference so small that we may neglect it, and conclude in consequence that the wall before the Crusades was the same height as it is now. And we have seen above that it may be considered as produced at a single effort.

'As to the period which extends between this epoch and that of the *first construction*, the field is still open to conjectures as to what concerns this part of the monument.

'If we wanted to find examples of analogous dispositions we might, as M. Ie comte suggests, find the *point de départ* in certain edifices of central Syria, towards the fifth or sixth century. As to relations with other places, we might multiply them, but without great advantage to the chronological elucidation of the special question which occupies us.'

'I have at length succeeded, after many researches in the various libraries in Jerusalem to which I have access, in getting at the original text of John of Würzburg, and in studying the principal passage of this author on the little arcade round the Sakhra. Here is the passage:—

'"Supra se etiam, juxta tectum, locum deambulatorium circum quaque exhibentibus et habentibus canales plumbeos qui aquam pluviatilem evomunt."

'The construction of the phrase is sufficiently obscure, and the manner in which Tobler and M. de Vogué render it seems to me a paraphrase rather than a translation. If we keep to the text, taking the architecture itself as our commentary, it seems that *supra se* should mean, in the incorrect language of the author, "above the exterior wall" of which we have just been speaking, as well as of the interior wall, and not "above the roof," since immediately afterwards we have *juxta tectum*, "near the roof." It is the only explanation possible, if we admit the punctuation adopted by the editor of the text and followed by these two learned archæologists. But I think that this punctuation, which makes of the words *supra se* a phrase by themselves, is an error; and, in fact, by cutting up the text in this fashion, the words *exhibentibus et habentibus* belong to nothing at all. Replace the colon by a comma, and restore the passage as follows:—"cum pulcherrimis laquearis supra se etiam, juxta tectum," etc., and translate: "Between the two walls there is an intermediary roof, with a beautiful panelled ceiling, over which (which has above it), running all round, is a gallery, and which has leaden pipes for getting rid of rain water." From this rigorous translation, it

is clear that the gallery was above the ceiling, and therefore had a large relative width, not being limited to the breadth of the wall Possibly the inclination of the roof stopped suddenly before reaching the external wall, surmounted by arcades, and let the water fall upon the floor of the gallery here they would be caught by the leaden gutters and thrown out by gargoyles placed most likely at the same points as we now see them Tobler translates *canaks* by *rohren*, De Vogué by *tuyaux* It is better, I think, to use the French word *chéneaux* derived from it, and signifying, not a tubular conduit, but an open canal

Excavation within the Haram

'The excavation undertaken by the Memour against the interior of the east wall of the Haram, of which I have already spoken, has been sunk to more than 30 feet The point chosen is nearly 160 metres (173 yards) south of the Golden Gate We have now reached, and even passed below, the level of the soil outside The excavation has led to no archæological or practical result, nor any traces of the dressed stones searched for It has passed through made-up earth mixed with pottery, cubes of mosaic, fragments of marble, etc We descended the shaft, which is not very cleverly made and narrowly framed in We were able to examine the wall as far as the shaft goes, and can state that the stones have no mediæval dressing. . I am afraid that the shaft will be shortly closed

'At the bottom of the shaft the wall presents two successive sets back, the first 3 inches of projection and 15 inches of height, the lower 7½ inches of projection, with a height as yet undetermined At a point 6 feet 6 inches above the first projection the wall shows a very sensible change in construction, seeming to indicate two successive visible epochs, visible also from the outside the more ancient below, the more modern above, naturally

'Now a few remarks on my visits to the Haram The blocks of the inner side of the exterior wall of the Kubbet es Sakhra, visible in the frame of the wooden stair leading to the roof, are pierced by numerous openings, in which have been inlaid small pieces of flint, having their visible faces cut and polished I cannot explain the purpose of this singular arrangement, which has perhaps a superstitious origin The dressing of the blocks is not mediæval

'The application of the rule of mediæval dressing has led us to establish several important facts in the *enceinte* of the Mesjid (1) Great bases of engaged columns on the platform and near the Mosque of the Mogrebbin, certainly mediæval (2) Various fragments of architecture of the same origin built up here and there (3) Mediæval stones and gate in the wall north of the gallery, which joins the Aksa to the Mosque of the Mogrebbin * (4) *The whole south-west angle of the esplanade of the Sakhra is entirely mediæval* (5) Several buttresses on the west side of the platform are made up of materials of the Middle Ages. I observed on the pillars of the porch north of the Haram a large number of Latin masons' marks (pricked with the point of the tool), they are engraved on great blocks, *which have been stripped of their mediæval dressing* I suppose them to be older blocks simply used again by the Crusaders, who put signs on them to facilitate placing them in proper positions

* This gallery was already known to be the refectory built by the Knights Templar

Inscription in the Haram.

'I have rediscovered, within the Haram, an inscription of some importance, pointed out by several Mussulman authors. Up to the present time we have not been able to establish its existence. It is a stone on which are inscribed the dimensions of the Haram measured at a very ancient period.

'The Arab chronicler of Jerusalem, Medjr ed Din (p. 29 of the text edited at Boulaq), after having recorded that Hafiz ibn Asakir assigns to the Haram 755 royal dhraa of length and 465 dhraa of breadth, quotes this passage of one of his predecessors, the author of the "Muthir el Ghoram," from which he repeatedly borrows.—"I saw, a long time ago, in the north wall, above the door adjacent to the Bab ed Douidariyé, inside the surrounding wall, a slab on which are inscribed the length and breadth of the Haram. These measurements do not agree with what we have stated above. It is there said that the length is 784 dhraa, and the breadth 455, the nature of the dhraa is specified, but I was not able to see if it was the dhraa mentioned above, or another, on account of the writing being injured."

'The Persian Hadji, Nasir ibn Khosrou, who came on pilgrimage in the year 438 (A.H.), and consequently before the Crusades, saw this slab also. "On the northern side, which is contiguous to the Dome of Yakub (on whom be peace!), I observed an inscription on a tablet, to the effect that the Mosque was 704 yards long and 455 yards by the *Malak* (measure)."—*Major Fuller's translation.*

'This inscription I have just found by accident fitted into the wall of one of the many Arab Medrésés which adjoin the northern face of the Haram, it is immediately to the right, coming out of the Bab el Atme, which seems to correspond to the "Bab ed Douidariyé" of the ancient account. In order to see it, you must mount the steps of a stair leading to the upper floor of the Médrésé. The stone is of hard *mezzeh*, and the writing *neshky*, carelessly traced. It is composed of four lines separated by four horizontal strokes, the first being broken, with nothing on it but the traditional invocation, "Bismillah er Rahman er Râhim." After this I read, without much difficulty, as follows:—"The length of the Mesjid is seven hundred and four dhraa, and its breadth is four hundred, fifty, and five dhraa, the dhraa of ."

'The length is broken off in the tens, but we cannot hesitate between thirty (*thalathin*), and eighty (*thamanin*) according to the author of the "Muthir el Ghoram," the last number would be the true one. Nasir seems as well to have been embarrassed in the reading of the last number, and to have omitted altogether the doubtful number of tens. The last word, containing the designation of the kind of dhraa, is hard to make out, it was also hard in the time of the author of the "Muthir el Ghoram." Nasir does not hesitate to write the word *Malak* (of the king), but the appearance of the original makes me doubt the exactness of this reading.

'Now that we are on this point, which is not without interest, let me notice further that the author of the "Muthir el Ghoram" gives as dimensions of the Haram, measured by the line, in his time, 683 dhraa for the length of the east side, and 650 dhraa for that of the west, the breadth, taken outside the surrounding wall, being estimated at 483 dhraa.

'In another passage (p. 377) Medjr ed Din also gives us the result of his personal observations on this point. He measured the Haram with a cord twice over, and found for the length, north to south, from the Mihrab of David to the Bab el Esbat (not counting the walls),

660 dhraa (the common dhraa), and for the breadth, between the cemetery of Bab er Rahmé and the Médrésé of Tenguiz, 406 dhraa

'We have now before us very different figures and divergences, the more difficult to harmonise because they spring from the differences in the dhraa employed, further difficulties are the manner and points of measurement, and the broken condition of the inscription quoted, all perhaps evincing, which would be of interest to us, real variation in the extent of the Haram at certain epochs in the Mussulman rule

'I have already informed you [in a private letter] of the existence of mosaics within the arcades of the outer wall of the Kubbet es Sakhra It results from this fact that between the period when these arcades were opened and when they were completely covered by the fayence tiles now placed on them, they passed through an intermediary stage, that is, they were built up and transformed into little niches, the interior walls of which received a rich ornamentation of mosaics in coloured and gilt glass If, as I have said before, these arcades were open and formed a part of the gallery in existence at the time of the Crusades, we must admit that this transformation is later than the Crusades, and the addition of the mosaics to be the work of the Arabs, perhaps that of Saladin

'We know that Saladin must have subjected the Kubbet es Sakhra to many changes in order to efface the traces of Christian worship which had made the Mussulman sanctuary the Templum Domini. These mosaics are good enough, in colour and design, to belong to such a date. Thanks to the kindness of the Memour, who uncovered a second arcade next to the first, I ascertained that each arch had received the same ornamentation. The mosaics had disappeared from this arch, leaving marks in the casing to prove where they had been placed M Lecomte made a careful study of these mosaics, shattered as they were, and has succeeded in restoring the principal subject of the decoration in accordance with the position of the colours You will receive, if not by this mail, at least by the next, the result of this restoration By the intersection of the pattern, crosses are formed, to which I think it would be difficult to assign anything beyond a geometrical origin and value

'The presence, duly ascertained, of mosaics outside the Kubbet es Sakhra, is a fact of much interest in the history of this building, because it had been often doubted, in spite of the formal affirmation of the ancient descriptions From John de Wurzburg to Medjr ed Din, all authors agree in saying that the Kubbet es Sakhra was adorned with mosaics inside and outside The last trace of this system of decoration has disappeared from the outside, since the general application of the fayence—that is to say, since the sixteenth century

The So-called Tomb of Joseph of Arimathæa.

'About twenty yards west of the Holy Sepulchre, in the church itself, is a little crypt traditionally known as the Tomb of Joseph of Arimathæa, or the Tombs of Joseph and Nicodemus The question whether this crypt is ancient or not has long been recognised as one of the essential elements in the great controversy over the authenticity of the Sepulchre *

* It is this sepulchre which Captain Conder suggests to be that of the Kings of Judah (see paper on the 'Architectural History of Jerusalem' at the commencement of this volume)

'The ascertained existence in this place of remains belonging without doubt to a Jewish burial place, would at once remove one of the principal objections to the authenticity of the site

'The question may, in fact, be resolved into two propositions, the latter subordinate to the former—viz, (1) Can the traditional Sepulchre, which is within the walls of the modern city, really be a Jewish tomb? and (2) If so, can it be the Tomb of our Lord?

'The presence round the Sepulchre of a group of ancient tombs would solve the first difficulty, which many desire to see removed before proceeding to the second They do not see their way to admit that there were, in the time of our Lord, tombs existing on the spot which now is shown as His. It is, therefore, most important to establish, if possible, the fact that the shrine now adored has, or may have, within it, if not the very tomb in which Jesus was laid, at least a real Jewish tomb

'Both adversaries and partisans of the Sepulchre have appreciated the value of this preliminary difficulty, and have from the first made it the starting-point of their argument But neither have, in my opinion, produced an exhaustive examination of the place in dispute

'I have been enabled, by a careful study of this crypt, to ascertain sundry points which I believe have not been noticed by my predecessors, and which appear to me decisive in this question *

'A few yards west of the Holy Sepulchre, which rises isolated in the midst of the rotunda of the church, we enter, after passing through two of the columns on which the cupola rests, a little chapel belonging to the Syrians At the end of the chapel is an apse looking west A passage on the left, at the commencement of the apse, gives access obliquely to a narrow and dark retreat partly formed by walls cut in the rock, and partly by the wall belonging to the church itself

'There is a step cut in the rock Mounting this, we see at our feet, by the uncertain light of a smoky lamp, a black and angular hole in the rocky soil A few inches beyond we have before us the wall cut vertically in the rock In the middle of this wall is an arcade, semicircular and sunk in the wall, about 4 feet in height by 24 feet in breadth It covers two smaller arched openings, two black and gaping jaws—*kokim* (K J, Fig 2), which are sunk horizontally into the rocky foundation to a depth which we shall presently learn

'On the right is another wall of rock, making, with that of the end, an obtuse angle Two other openings (I H) are pierced in it, but these are walled up Between the second mouth and the entrance of the vault the wall is constructed, in it is a door (E) shut with a key

'The wall on the left is made up of a thick wall (Fig 1) which traverses diagonally the ditch cut in the ground, and forms, with the two other walls, two very acute angles The lamp is suspended to this wall

'This singular retreat is therefore triangular Two only of the sides are of rock, the third being a part of the wall belonging to the church, which appears to have been thus built across a pre existing cave The greater part of the roof is also cut in the rock

'At the left extremity of the wall, at the back, beside the opening of the hole K, we may

* Sir Charles Wilson has pointed out ('Quarterly Statement, 1877, p 129) that the side chambers which M. Clermont Ganneau notices were already shown in the Plan accompanying the Ordnance Survey notes on this tomb

recognise the existence of a third opening similar to the others, but walled up and partly hidden by the thick oblique wall. The stopping of this opening is not so perfect but that we can insert a thin stick and prove that here is a third place, L, parallel to the other two, and lying, like those, horizontally in the rock.

'On the wall to right we make a similar observation. There was once following the two openings I H, in the place occupied by the little closed gate E, a third opening parallel to the preceding. It is easy to ascertain, towards the point O, the commencement of the lateral wall of the opening now destroyed.

'Already in this disposition of rock-cut openings had been recognised the general form of Jewish tombs, which consists of a small square cave, with a certain number (generally 3+3+3) of *loculi* in three of the four faces. But even those who admitted this resemblance were unable to give a satisfactory account of the primitive form which belonged to this cave,

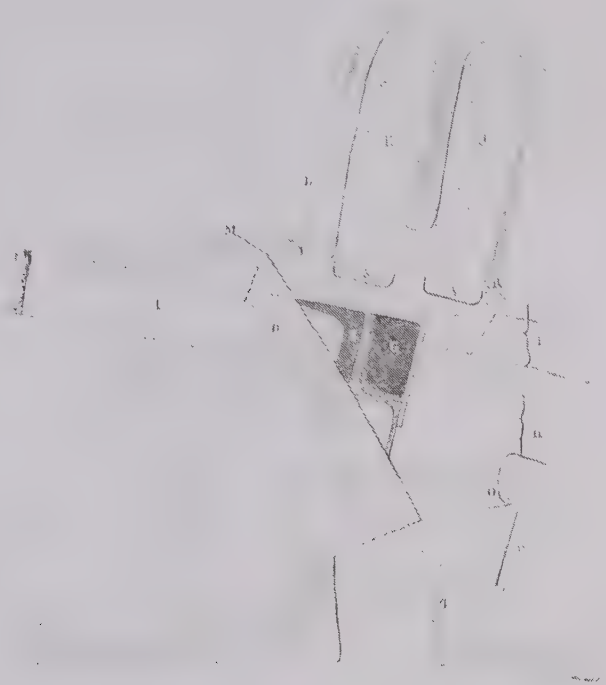
and could offer no reply to the grave objections which their adversaries made on certain strange peculiarities.

'Before proceeding further, let us consider a point which has contributed largely to the controversy; it is the kind of hole cut in the rocky floor of the chamber in front of the loculus K, which I have already mentioned. It consists of a triangular opening, Z G, the angle of which is opposed to the oblique wall on the left. The two sides of this angle show on the edge a small groove or rebate, probably intended to receive a horizontal slab. Along the wall the edges of the trench are irregularly cut away.

'On descending (at G) into this hollow, which is 3 feet 7 inches deep, we find ourselves in a kind of long cave, marked in dots on the plan, which runs partly (especially on the right between S S) under the rock; thus we can see at G how it penetrates beneath the *loculi* K J. This hole is less than 5 feet long by 1 foot 8 inches in breadth. Certainly no adult body could have been placed in it. Still less, again, in the hole Z, which is close to G, and separated from it only by a thin partition cut in the rock. This is rectangular,

and 2 feet in length by 1 foot 7 inches in breadth; it is partly covered over by a fragment of flat rock. Its height is 2 feet 7 inches. Between the edge of the rock forming the ceiling and the upper edge of the partition, which separates the two trenches Z H, there is only 10 inches of breadth.

'The smallness of these dimensions renders the examination of these holes extremely difficult. That is probably the reason why no one before me ever ascertained a *fact of*



capital importance, so much so as to profoundly modify all received ideas up to the present on one side and the other.

'But before stating what I may without any exaggeration call a discovery, let me return to a few details which are not without interest.

'Those who maintain the apocryphal character of the Holy Sepulchre, relying on the dimensions of the two latter holes (to which tradition attaches the names of Joseph of Arimathæa and Nicodemus) deny them any sepulchral character, because they are not large enough to contain the bodies of adults. The objection is specious, and it has been even pushed to an extreme by the supposition that we have here a pseudo-sepulchre hollowed out at the period of the Crusaders on a Jewish model, in order to furnish a material justification of the legend. I need not point out how inadmissible this supposition is, and how little in

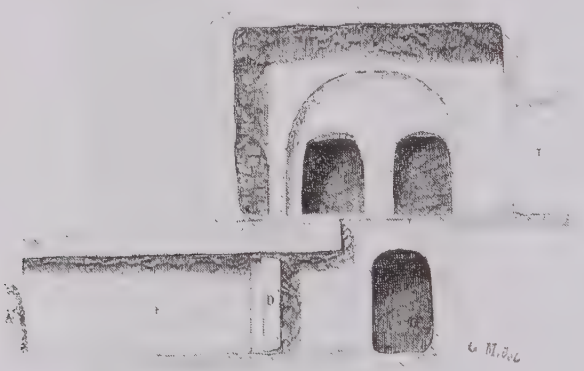
accordance with popular habits, which generally imagine the legend in order to explain the monument.

'It might be replied that we have simply two hollow places excavated as ossuaries, and intended to receive the bones accumulated in the sepulchre either directly or by means of those little funerary chests or coffins of which I collected so many and such curious specimens during my mission.

'The same objection has been urged against the *loculi* K J placed in the higher level. In fact, these two *loculi* hardly measure more at the present moment than 5 feet in depth, which is insufficient for a body of ordinary proportions.

'The *loculi* have in general a depth of 6 feet 6 inches; and it must be owned that this time the objection is more embarrassing than before, and that those who think these are fictitious or artificial sepulchres may find an occasion for triumph over this argument. The reply, however, although it has never to my knowledge been made, is easy.

'We saw above that the mouths of the two *loculi* are within a sunken arcade; hollowed



out, that is, of the flat vertical wall. Suppose for a moment that the arcade was made after the *loculi*. What follows? The *loculi* would be increased in length by the space which they lost in sinking the arcade, as the arcade would have simply shortened the *loculi* by cutting away the front part. Well, that is exactly what has happened. The *loculi* originally extended as far as S S in the drawing; we have the material proof. The removal of the rock has not been so skilfully effected as not to leave behind the visible traces of this original extension. These traces are easily to be recognised in the engraving of the cave.

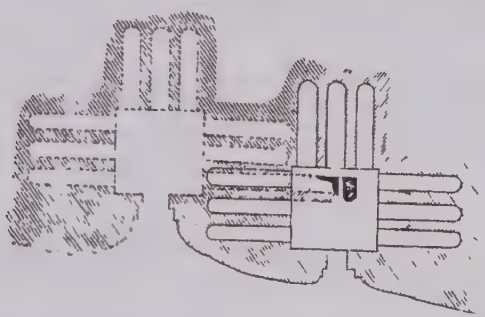
'We must also observe that this unmistakable mark, which goes considerably beyond the end of the arcade, is slightly in advance of the perpendicular face of the wall, which would tend to prove that the wall itself had experienced a slight setting back.

'If we proceed to restore the *loculi* to their original dimensions by measuring them from the end to the line S S, we shall find ample room for our regulation two metres.

'But, it will be asked, for what purpose was this arcade hollowed out and the two *loculi* thus disfigured? For what purpose? Here we may introduce our legend. Popular belief attached to this place the names of Joseph and Nicodemus. The double site has been

localized in the two *loculi*, visible at once to pilgrims, to this crypt half destroyed by the construction of the church Then, in order to fix this association indissolubly to the spot, and to give the sanctuary in course of formation a religious consecration, they constructed this kind of niche, convenient for the purposes of worship, and lending to these openings thus connected the aspect of a little chapel I am convinced, for my own part, that in the Middle Ages the two tombs revered were the two *loculi*, and not, as is generally admitted, the two little subterranean hollows to the consideration of which I must now come

'If we descend into hole G and contrive to introduce a head into the narrow opening of Z (10 inches) to examine its walls, we shall be amply rewarded for this disagreeable kind of *tour de force*, which makes the archæologist, so to speak, stand on his head The same results can, to be sure, be arrived at by lying flat on the ground and then sliding into the hole head first a position quite as uncomfortable as the first We perceive, then, that the



rectangular hollow, Z, is not in reality entirely formed by the rock, but that one of its sides, that of the end, parallel to the partition of rock, *consists of a vertical slab about 2 feet 3 inches in height*

'This slab covers the entrance of a long passage apparently cut in the rock, it seems to be placed against a little rebate, also well cut and jutting out behind it I was able to introduce between the interstices of the slab and the rock in which it rests a long stick, which penetrated to more than 6 feet 6 inches, after that I could get no farther, and I thought I was stopped by earth and rubbish I repeated my experiment several times, and touched with the stick the side walls and roof of this kind of corridor M Lecomte relieved me in this fatiguing work, and it is thus that we were able to get the elements of the figures marked F After a good many failures I managed to light up the passage by arming the extremity of my stick with a bit of lighted candle, and so verify by sight what I had discovered by touch

'A single glance at the drawings will show all those who are at all conversant with the question the considerable value of this fact, which, I think, I was the first to discover, and by which the field of a discussion already large is remarkably enlarged I need hardly speak of the ardent curiosity which impelled me to find out, if possible, whither the passage blocked by this mysterious slab leads There is the chance of finding one's self in some new sepulchral chamber totally unknown before, perhaps inviolate, perhaps pillaged, but so as to leave behind some relics precious to an archæologist—funerary objects, worthless in

themselves, but furnishing valuable evidence of synchronisms, ossuaries, fragments of ossuaries, with Hebrew inscriptions such as I found in other places round Jerusalem Cannot we picture to ourselves the conclusions which might be drawn, on the points at issue, from an epigraphic document of this kind? I indulged in all these dreams of an antiquary, and I may go on indulging in them, because the authorisation to remove the slab could not be procured The possession of this sanctuary is, like so many others, the object of dispute among the various clergies, so that one does not know where to apply Besides, at the moment I was in a very delicate situation towards the administrative and religious authorities of Jerusalem, in consequence of the quarrel about the "Moabite" potteries and the Gezer case. I had raised up against myself so many animosities that even my personal credit was beginning to suffer Everybody knows, besides, what grave political complications may be caused in that singular city of Jerusalem by the least attempt to touch, not only a stone, but even a rag, or a nail, in these disputed sacred places.

'Is it possible, from what we already know, to form any idea of what this unknown passage may be?

'The first idea which presents itself is that, as in many other sepulchral chambers, a corridor gives access to a second chamber situated at a lower level But, on reflection, that seems difficult to suppose The dimensions of this corridor, although narrow, are

indeed broad enough to admit of passage, and the different cemeteries of Jerusalem furnish us examples of corridors as narrow and as low, but the dimensions of the mouth of the passage, between the edge of the flooring and the partition, are certainly too small A living man might with difficulty thrust himself through this kind of cleft, but it appears to me almost impossible to force a body through The rigidity of death would prevent the bending of the limbs necessary to get through this cleft into the passage itself

'The same objection may be raised against those who may be tempted to consider this space as belonging simply to a supplementary *loculus*, the slab closing the original opening, and the *loculus* coming to an end in the rock close to the point A, where I ascertained the presence of the *débris*. Passage or *loculus*, this hole offers equal difficulties to the introduction of a corpse Besides, in the latter assumption, we are open to new considerations

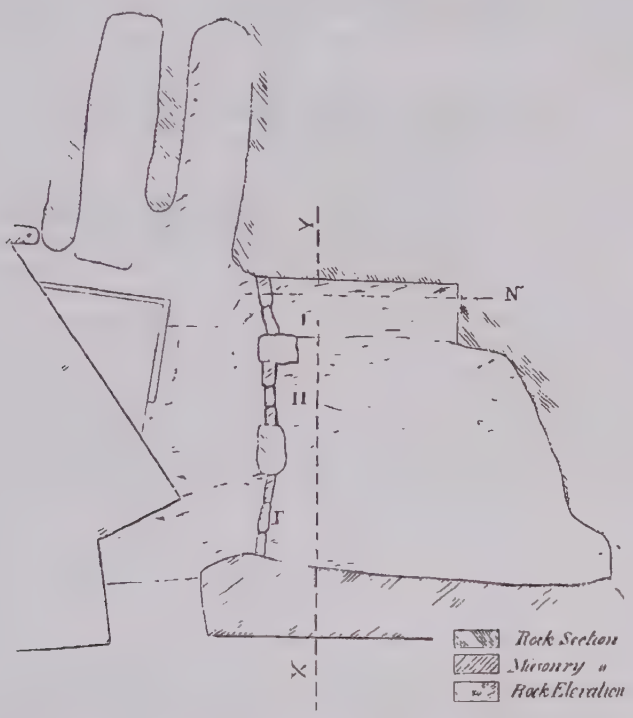
'1 The mouth, nearly impracticable, of this opening, would be in advance, in the middle of the sepulchral chamber, we should expect it to be, as usual in such cases, below the *loculi* in the left wall, and in the vertical level of this wall

'2 The height of this *loculus*, about 2 feet 7 inches, would be greater than that of the *loculi* (L K J) of the same sepulchre

'3 The length of this pretended *loculus*, measured from the partition which separates G and Z to the point A reached by my rod, is 9 feet 1 inch, that is, it would exceed by 2 feet 7 inches the regular length of the *loculi* If we only measured from the slab D—*e*, from the rebate, we should obtain the normal length of 6 feet 6 inches, but what are we to

make, in that case, of the trench 7, which would then be situated in front of the *loculus*, and would be a useless and unintelligible prolongation?

'3. The accumulation of rubbish in A, at the end of the passage, seems to show that there is a large space beyond from which the rubbish comes, the angle of this accumulation A leads us to believe that the *debris* has fallen in a direction from A to D, and not from D to A, in which case the angle would be E, just the reverse. Now, the end of



the *loculus* being exactly marked by this point A, whence come the *debris* which we find where we looked for rock?

'This place, therefore, is not a blind passage.

'The right wall (R O) is not the original wall, although it is cut in the rock. It would form, with the rocky wall at the end (in which are the *loculi* K J), nearly a right, and not, as in fact it does form, an acute angle. It is probable that it lay originally along the line R T, and that it was afterwards cut again to enlarge the chamber, and especially to form a passage between the wall on the left and the point O. Naturally the *loculi* I H L have been shortened by the operation, so that we can now predicate of them that when it is possible to explore them, they will not be found of the normal length of 6 feet 6 inches.

'The original *point de départ* of this wall thus altered is perhaps marked in the rock by a small notch at the point R, although this lies a little behind the marks at S S, the mouths of the *loculi* K J

'We may observe besides, that in adopting this, so to speak, forced restoration of the wall on the right, we note that one of the walls of the *loculi* N and E (in O) is manifestly perpendicular to this imaginary line If we suppose that the side walls of the three other *loculi* have been slightly altered or re-cut transversely to a depth at which they were originally irregular, we can establish between the wall on the right and the *loculi* which were pierced there, the perpendicularity which is *de rigueur*, and which the present state of the place is far from showing

'The *loculus* J of the wall at the end, and the *loculus* I on the right wall, considered by themselves, are very nearly at right angles at R, as is the custom in the tombs of Palestine, but the irregularity commences at the second side wall of the *loculus* I, which is not parallel to the first

'Taking all these observations into consideration, we had better suppose the corridor to be nothing else than a *loculus* belonging to a *neighbouring chamber*, and that the end of it was perforated and prolonged at the time when the trenches G and Z were cut It is an accident which not infrequently happens in the tombs of Palestine often two sepulchral caves are so close, that the *kokim* of the one penetrate to the interior of the other. This penetration may be accidental, the result of inaccurate measurements, or ignorance of the existence of a neighbouring chamber, or intentional, to establish a communication between the two caves and make them one and the same tomb Here the communication would seem to have been due to accident, otherwise they would have had to make access to the "corridor" easier and less painful Nevertheless, I cannot be certain on this last point, it is most prudent to wait for a complete exploration

'However that may be, *loculus* or corridor, it is more than probable that this passage, unknown up to the present day, leads to a second sepulchral chamber situated on a slightly lower level than that of the first, and completely covered over with the building of the church

The following are Sir C Wilson's notes on M Clermont Ganneau's paper as to this tomb.

'In an extremely interesting paper in the last "Quarterly Statement," M. Ganneau has drawn attention to the tomb chamber in the Church of the Holy Sepulchre, known as that of "Joseph and Nicodemus," and has given his reasons for believing that there is a second and somewhat similar tomb-chamber at a lower level There is nothing improbable in this suggestion, though I think it rather hazardous, as the facts upon which M Ganneau bases his argument might be explained in another way My object, however, is not to criticise M Ganneau's paper, but to give a few additional details which came under my own observation whilst employed upon the Ordnance Survey of Jerusalem in 1864-65

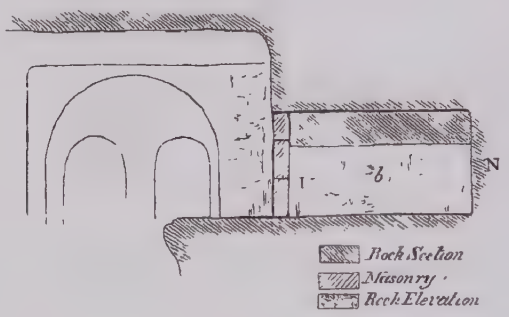
'The first is that, contrary to the usual custom at Jerusalem, the tomb chamber is excavated in the hard (*missie*) and not in the soft (*malaki*) strata of limestone, the second is that the beds or floors of the *kokim* slope downward from the mouth, the general rule being to cut them horizontal M Ganneau mentions a door, E on the right of the chamber, of which he does not appear to have been able to procure the key I was more fortunate, and the following note on the chamber to which the door gives access may be of interest to the

subscribers of the Fund. The chamber, as will be seen from the plan, is irregular in shape; the wall on the right-hand side on entering is masonry; the remaining sides, as well as the roof, are rock. It is evident that the chamber was formed, probably when the church was built, by cutting away a portion of the original tomb-chamber in such a manner as to leave a sort of cave, and the floor was lowered at the same time for a certain purpose

explained below. I think M. Ganneau is quite right in supposing that the door, E, was originally a *kôk*, though its shape is now rectangular; this *k*. 1 has entirely disappeared, and *k*. 2 has that marked H, with the exception of the mouth and a small portion of the sides. The third *kôk*, I, is of special interest; the right side and a portion of the roof have been cut away, but the bed has been left untouched, and the remaining portion of the roof forms a

sort of rock canopy over it. The reason for lowering the floor (*g f*) is now apparent; it was to convert the bed of the *kôk* (*d e*) into a raised bench or altar, and I believe on certain occasions it is still used as an altar by the Syrian community to whom the chamber belongs. The illustration shows also in elevation the opening of the *kôkim* H, I, and of the door E, in the thin wall of rock which separates the chamber from the original tomb-chamber of "Joseph

and Nicodemus" In my notes to the Ordnance Survey of Jerusalem, I alluded to the light which the *kok* I might possibly throw on the primitive form of the Holy Sepulchre My impression is that if the Holy Sepulchre were originally a *kok*—and I see no reason why it should not have been—the mode of proceeding was somewhat similar to that described above, that is to say, the floor of the original tomb-chamber was lowered, the side of the *kok* was cut away, and a canopy of rock left over its bed As time went on and changes were made, the *kok* would probably be entirely isolated, the canopy of rock disappear, and the tomb assume its present form I have endeavoured to show this in the sketch Felix Fabri, 1480 A D, mentions that pilgrims were in the habit of knocking off little pieces of the rock to carry away as relics, and it is possible that this may partially account for the disappearance of the roof of the *kok* (*e f*) Some of the early pilgrims mention a cave, this may



be explained by reference to the little Syrian chamber in which a roof of rock has been left, and the Holy Sepulchre may have undergone similar treatment

M Ganneau, in his opening paragraphs, alludes to the doubt which at one time existed as to the nature of the so called tombs of Joseph and Nicodemus, I cannot understand how any one who had ever seen the rock-hewn tombs near Jerusalem could have any doubts on the subject The chamber in which they are situated is unmistakably a Jewish tomb-chamber, and the tombs themselves are as clearly Jewish *kokim* Whether this tomb-chamber was inside or outside the second wall is quite another question, I think myself it was inside, but the question is one which would require more space for argument than can be given at present

'There is no rock visible in the chapel of the Holy Sepulchre at the present day, it is entirely concealed by the marble casing'

The following note was also supplied by Captain Conder

'It has long been pointed out that the stone closing the door of our Lord's tomb was not a mere shapeless mass of rock, but a carefully constructed apparatus peculiar to Jewish tombs There are one or two points with regard to the rolling stone which I have not, however, seen noticed in any account of such tombs

'The rolling stone is not a very common method of securing the entrances of the rock-cut sepulchres, and it is natural to suppose, from the great advance in mechanical simplicity,

that it is a late contrivance The large majority of the rock-cut sepulchres, some 500 of which have been examined in the course of the Survey, are not fitted with the groove necessary for the use of the stone They are closed in some instances by a sort of portcullis of stone, but most frequently by a stone door on pivots fitting into holes bored above and below the entrance, and closed by a lock The lock was probably of metal, since in every instance yet examined it has disappeared The rolling stone generally measures about 3 feet diameter, and is 1 foot thick in some instances, resembling a cheese set on end It rolls right or left of the doorway, which is some 2 feet wide, and it is kept up by a ledge of rock having a groove behind it, into which the stone is pushed back to open the tomb The bottom of this groove is slightly sloping in some cases, so that the stone would roll down to close the door by its own weight The weight, taking the specific gravity of the rock at 2 7, would be about six cwt. Thus not only is it entirely impossible to open the tomb from within, but it is difficult to do so from without, and a shock of earthquake would not, as has been lately suggested, cause the stone to roll back up hill, nor would it remain in that position unless scotched beneath

'The principal point to be noticed is that this kind of door seems to belong to the later Jewish tombs This accords exactly with its use in the new tomb of Joseph of Arimathæa The only dated example known is that of the tomb of Helena, Queen of Adiabene, mother of Izates, who was buried in Jerusalem in the first century (Ant xx 4, 3) In addition to this, it may be remarked that in the country north of Cæsarea, where there are many examples of this kind of door, the tombs are of the *loculus* description, and not *kokîm* tombs The same remark applies to the instance of a tomb near Endor, and in other cases the tombs contain both *loculi* and *kokîm* but we have collected no instance of a tomb with *kokîm* only closed by a rolling stone In a former paper I have shown reasons for supposing the *kokim* tombs to be the older form used by the Jews, the *loculi* to be the later form, also used by them (See 'Quarterly Statement,' January, 1876, p 19) In the Mishna (Baba Bathra, vi 8) a description of a tomb is given having *kokim*, but no account of a rolling door is added, and the form of antechamber prescribed precludes the possibility of such a method of closing the entrance, but the description applies exactly to the majority of the more ancient Jewish sepulchres

'The conclusion which may be drawn from the above notes seems to be that the Holy Sepulchre was in all probability a *loculus* tomb

'This deduction is in accordance with the description in the fourth Gospel (xx 12)—'two angels in white sitting, the one at the head and the other at the feet where the body of Jesus had lain'—a disposition which is evidently impossible in the case of a tomb with a *koka*, which is, as has often been explained, a sort of pigeon hole running in from the wall of the chamber some 5 to 7 feet in length, and 2 feet six inches to 2 feet broad, the feet of the corpse being at the nearer end, the head at the further The *koka* was closed by a slab 2 feet broad, 2 to 3 feet high The *loculus* tomb has a sort of sarcophagus under an arched roof, the body lying parallel to the wall of the chamber

'An argument for the identity of the present site has been drawn by De Vogué and by M Ganneau from the existence of an ancient *kôk* tomb in the church This position has been considerably strengthened by the quotation of the Mishna (Baba Bathra, ii 9), which runs as follows

'"Corpses and sepulchres and tanneries are separated from the city fifty cubits"

'Still there is evidence from the same sources to show that sepulchres dating from an early

period existed within the walls of Jerusalem, and I may perhaps be allowed to collect these passages for the use of those interested in the argument

'Mishna Parah III 2 "The buildings (Hazeroth) of Jerusalem were founded on the rock, with caves beneath them, because of the Kabr Hat Tahtum" (or "Sepulchre of the Abyss")

'The passage continues to explain that for the same reason the children sent to fetch water for the Red Heifer Sacrifice from Siloam were mounted on bulls, in order to have their feet off the ground, so as to escape pollution from the same source

'The explanation of the term "Sepulchre of the Abyss" is given by Maimonides, commenting on another passage (Nezir IX 2), where he speaks of it as a hidden tomb, the depth of which was not known to any man Thus it would appear from the Mishna that the Jews were aware of the existence of ancient tombs in and beneath the surface of the city

'The Tosiphtah gives us further information It is a work of authority almost equal to that of the Mishnah, being attributed to Rabbi Hijah, about 120 A D Commenting on the same tract (Tosiphtah Baba Bathra, ch. I), it states that all the sepulchres within Jerusalem were transferred outside the walls except those of the family of David and of the prophetess Huldah

'Another passage of the Tosiphtah is given by Neubauer (Edouyoth, ch II) "Bones had once been found in a house of wood The Rabbis wished therefore to declare the capital unclean, but Rabbi Jehoshua objected, saying, 'It would be shameful if we declare our houses unclean'"

THE STONE OF BETHPHAGE

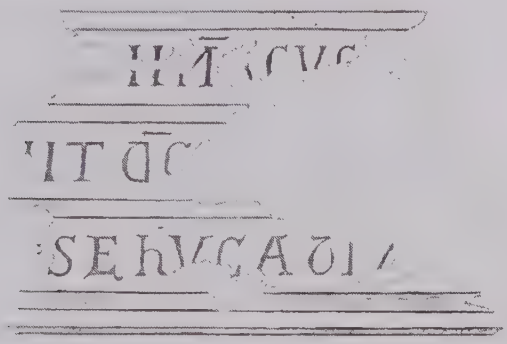
'I have received from the Frère Lièvin certain documents and drawings relating to an important discovery lately made near Jerusalem They describe a Crusaders monument, interesting both as regards the history of Western art in the East, and as illustrating the topography of Jerusalem Frère Lièvin was fortunate in obtaining the valuable assistance of Captain Guillemot, to whose pen we owe the drawings here engraved Further on will also be found a notice, drawn up by Captain Guillemot, on the monument, its origin and destination, in support of which I shall have a few remarks to offer The drawings are the more valuable because the monument has greatly suffered since the clearing out I heard, for instance, in October, that a part of the inscription painted on the western side fell off shortly after it was copied

'The excavations undertaken with a view to clear out the monument met with every kind of obstacle from the natives, until the intervention of Reouf Pacha, who has rendered a great service to science in this matter—one which ought not to be forgotten, and which leads us to count on him for the future as an enlightened protector and patron of archæological research.

'The following is the text of Captain Guillemot's report

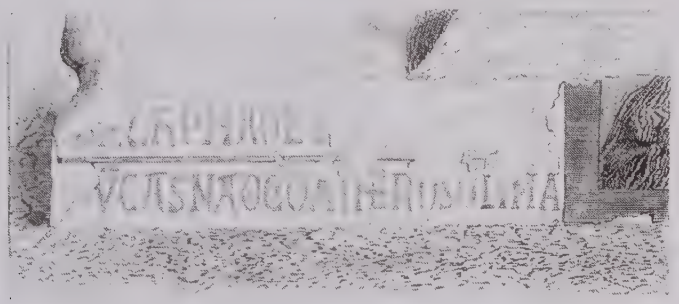
'"On leaving the Convent of Carmelites on the Mount of Olives to go to Bethany, the path to the east follows the contour of the south side of the mountain After a gentle descent of about five hundred metres it turns abruptly to the south, passing over a natural ridge, which unites the Mount of Olives with that of Bethany

"When you are arrived at the middle of the ridge, turn to the east, the Dead Sea is visible ... distance; behind you, on the west, is the group of sanctuaries, the Ascension, the ... on the north, at the left, you are overlooked by the new con-



tions of the Russian Archimandrite; the road of Bethany, on the right, runs to the ..., and if you advance a few steps you are on the spot where the most ancient traditions ... Bethphage.

"Some time in the spring of the present year a Fellah of Jebel Tur, digging on this spot ... hope of finding building stones, struck upon a polished block, upon which, on clearing ... the earth, he found paintings and characters. In the hope of backsheesh he ran to



... however, preoccupied with the coming war, told him to ... and leave it in the place.

... past the Franciscans have been accustomed to celebrate every year the ... at Bethany, ... their return they halt at Bethphage in order to recite ... Palm Sunday. During the ceremony of this year (July 23, 1877) an assistant ... certain letters on the *stèle*, which had been imperfectly covered over, and clearing

away a portion of it, found a Latin inscription in Roman characters. The father in charge of the sacred places, recognising at once the importance of this discovery, instructed Frère Lièvin to commence excavations as soon as possible, to take notes of and to copy accurately everything that should be found.

'"Shortly after, Frère Lièvin, having with him a small band of workmen, armed with pickaxe and spade, brought me to the Mount of Olives and asked for my assistance. The moment our work was commenced the cupidity of the Fellahin began to raise difficulties. Every resident of Jebel Tur pretended immediately to be the sole proprietor of this spot, hitherto neglected; and, to crown all, the villagers of Bethany declared that the place

belonged to their territory. I had, however, time to make notes of two fragments of inscription and a sketch of the north side of the fresco, representing the master of the castle according to the two disciples permission to carry away the ass and the foal.

'"Next day, when I came back to compare my finished drawing with the original, and to study the details, the excavations had been completely filled up and again partly cleared out. Happily, the part which I then wanted was not hidden.

'"Next day, the same trouble; there was only the western face which remained partly uncovered. It was possible, however to draw the figures bearing palms, and hardly visible, which stand on the right and left of the niche. Two days afterwards the whole was completely covered over; not even the top of the stone was visible.

'"These proceedings resulted from disputes between the Fellahin, some of them wanting the excavations to proceed in the hope of getting backsheesh, and the others filling them up, as fast as made, out of jealousy.

'"Things being in this position, Frère Lièvin had recourse to the Pacha, who immediately accorded us his protection. Orders were given by his Excellency to the chiefs of the villages of Bethany and Jebel Tur; a soldier was placed on guard over the excavations, and we were enabled to continue our labours in peace.

'"The fresco, which I had, happily, copied carefully, had been seriously damaged by the pickaxes and by the continual friction with stones and earth; several letters of the inscription had disappeared. I made haste to note all that remained; it was fortunate that I did so, because shortly afterwards an unknown hand destroyed in our absence the greater part of the rest.

'"The *stèle* measures 1·30 metres (4 feet 3·18 inches) in its greatest length; in breadth it

[illegible] (4 feet 5 63 inches) [illegible] (4 feet 5 inches) [illegible] 5 feet 11 inches). It is com-

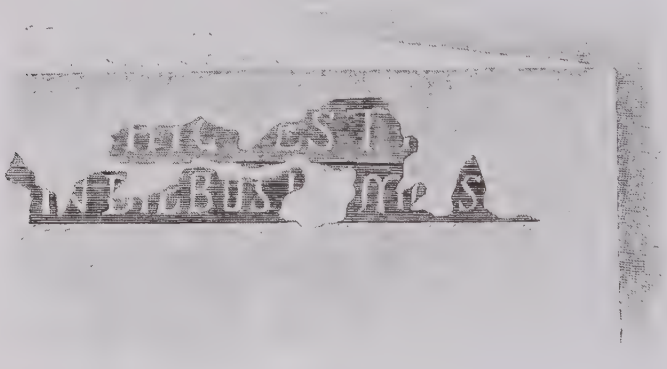
[illegible] rock on which it [illegible] ate soft and hard beds

The [illegible] which [illegible] of which it forms part except on

'"At first sight the monument would be taken for an altar, or even for a tomb. But there exist no traces of the steps and other accessories to an altar. As regards the second, there is no sign of any opening. The white stucco which covers it is still solid in certain places. The paintings are finely executed and of a striking character. Nevertheless, the inscriptions leave no doubt as to the origin of this decoration.

'"But is it only a restoration? At what period was the stone cut? That is a question impossible to answer. Those who thus ornamented it must have had no doubt that formerly the rock stood out above the level of the soil, presenting a sort of rustic seat, and that our Lord may have sat upon it on a certain memorable day.

'"*The Resurrection of Lazarus.*—The choice of the south side for this painting, which faces Bethany, and the subject, that of the permission to take the ass and the foal, makes me think that the west part, facing Jerusalem, must have represented the triumphant entry of our Lord



into the Holy City. The figures which can still be seen bearing palms, on the two sides of the niche, are in favour of this hypothesis.

'"This painting is much superior to the others. I believe, however, that it is by the same hand.

'"On the façade of the Church of the Holy Sepulchre there is a Resurrection of Lazarus carved in the prolongation of the lintel. It is in great measure identical with that of Bethphage. Did the painter copy the sculptor? Perhaps while studying the vigorous bas-relief he may have acquired a more perfect understanding of the line and of light and shade. I am happy in having been able to copy this composition in time. At present it is greatly damaged; wet fingers have been passed over the figures, and have effaced them; many of them have quite disappeared.

'"The fresco on the other side appears to be the blessing of the restoration of this little sanctuary. The notch which is observed in the upper part, about the middle, may have been to hide a defect in the stone.

'"On clearing away the earth from our excavations we came upon a circular construction of a much more ancient appearance than the decoration of the *stèle*. The disposition and arrangement of the materials have nothing in common with Crusaders' work. Besides, at

two metres from the circumference we found the fragment of a column standing still upright upon its base Is this the first and most ancient sanctuary, which those who restored the monument were unable to repair in its original grandeur? More complete examination of the place is required to prove the point

'"In any case, we ascertained that the *stèle* itself was in the centre of the circular space

'"Near the monument lie a number of cisterns, some in ruins, some covered over and still in use Their depth and size, and the fact that they are gathered together over a narrow space, their acknowledged antiquity, all go to prove that there once existed an important village in this place Two of the reservoirs are in ruins: two others serve as watering places for cattle A small rocky ravine, which used to feed these cisterns, separates them towards the west from a mamelon which may very well be the site of Bethphage I have seen on the ground broken pillars, fragments of marble pavement, an enormous quantity of broken Jewish pottery, and mosaic cubes of all colours, all of which have been brought to light by the cultivation of the soil

'"I one day met the proprietor on the spot at the moment when he was taking out of the ground a stone evidently once part of an aqueduct, and evidently of great age I asked him if he found many things like it He replied, 'You see all this place, I cannot dig anywhere without finding walls' Then he added, 'There was formerly a city on this spot' That, indeed, is the opinion of the whole country

'"It does not seem to me possible that Bethphage could have been placed on the side of a road which, shut in to right and left by two hills, is a mere gulf for the west wind, so terrible in this country The old cities in the vicinity are all built on slopes which incline to the south-east Now this mamelon near the cisterns has a similar inclination

'"Again let us turn to the sacred narrative The Saviour came from Jericho towards Jerusalem, he had passed Bethany, and passed over the ground broken by the hills which separate the valleys of Bethany and Bethphage 'Go,' He said to His disciples, 'to *the village over against you*' (Matt xxi 2) Now the road has not been changed, since it could have passed no other way than over the narrow ridge to join the Mount of Olives If, then, the village was on the road, why send the disciples, since the Lord would pass it Himself? And if we look at the plan, we may be sure that the disciples, to make a short cut, descended the valley to climb the mamelon of Bethphage, while our Lord, with the rest of His disciples, continued to follow the road in the direction of the Mount of Olives, and there waited the return of the disciples

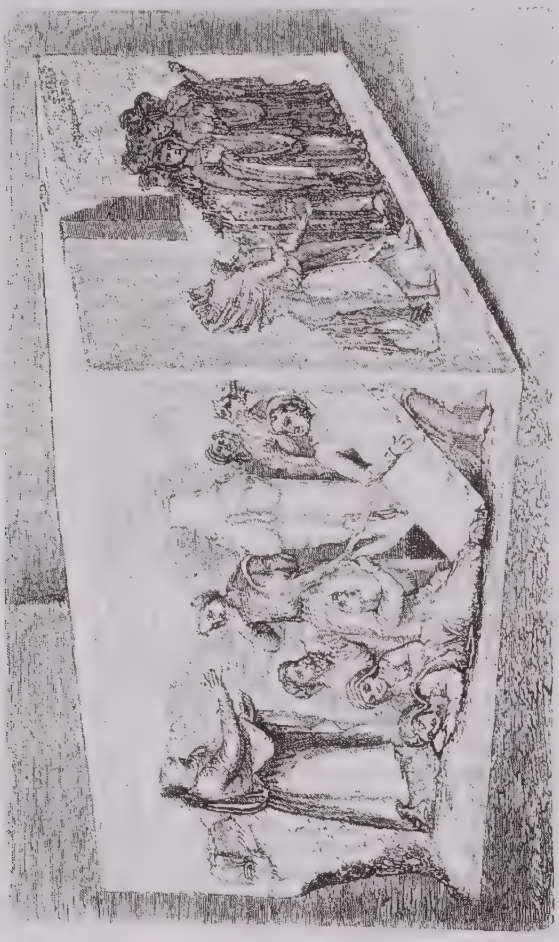
'"And to the faithful this stone would be that on which Jesus rested by the wayside and where He mounted the ass"

'To this report M Clermont Ganneau appends several pages of valuable comment He points out that the niche shown in the drawing may, as Captain Guillemot suggests, have been carved on the stone originally, and in order to hide some defect, or it may have been cut by a Fellah of more modern days to receive a beam for some construction of his own The inscription he ascribes, as beyond doubt, to the twelfth century On one of the faces occurs the name of Bernard Witard There appears in the Cartulary of the Church of the Holy Sepulchre the name of Johannes Guitard (= Witard) Probably Bernard belonged to this family, and defrayed the expenses of the monument

'As regards the constructions found round the *stèle*, M Ganneau is of opinion, in which Lieutenant Kitchener's observations support him, that the wall was not actually circular, but

apsidal, and part of a church, and he calls attention to the importance of proving that the church was built before the stone was painted. His own discovery of the *taille médiévale* ('Quarterly Statement,' April. 1874) may be applied here.

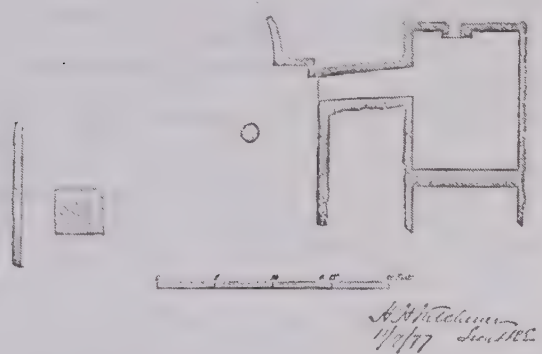
'As regards Captain Guillemot's suggestion that the stone may have been regarded as



that on which our Lord rested, M. Ganneau brings direct proof that such was the case. He quotes Theodoricus de Locis Sanctis (A.D. 1072): "Milliario ab Hierosolymis Bethania, ubi domus Simonis leprosi, Lazari et ejus sororum Mariæ et Marthæ erat, distat, ubi Dominus

hospitari solebat. Sita est autem Bethania juxta vallum Oliveti, montem à parte orientali inantem. A Bethania ergo in die palmarum dilectissimus dominus noster Jesus Christus edens et Bethphage veniens, qui locus inter Bethaniam et montem Oliveti medius est, tiam honesta capella in ipsius honore est fabricata binos ad adducendum asinam et m misit discipulos, et stans super lapidem grandem qui in ista capella manifeste videtur, ino insidens per montem Oliveti Hierosolymam properavit cui turba multa in descensu tis ipsius obviam processit." (Tobler's edit., p. 52.)

So that in the second half of the twelfth century they showed between the Mount of s and Bethany the site of Bethphage and the place where Jesus had sent two of His



des to seek the ass and the colt. There they had raised a "fair chapel"—*honesta capella* l in this chapel was visible the stone on which our Lord stood before mounting the ass. "This rock," says M. Ganneau, "can be no other than this monolith, from which the anding rock has been carefully cut away, lovingly covered on all sides by delicate paint- which remind one of illuminations in a precious missal rather than an ordinary fresco to hide the naked stone. . . . We may remember that the Crusaders had an especial lection for fresco painting: they covered the walls of all the churches on the sacred sites frescoes. Many pilgrims, especially John of Wurzburg, have preserved the description se paintings, the subjects of which, all borrowed from the Old and the New Testament, in accordance with the traditions of each sanctuary. These paintings were accompanied ng inscriptions, generally in rhymed Latin, according to the fashion of the time. It is that John of Wurzburg did not visit the place and copy the inscriptions. He mentions, ver, the church of Bethphage. Several other writers of the twelfth century speak of hage and its church. Sæwulf, however (A.D. 1102), speaks as if a church had not yet erected: "Bethphage, ubi Dominus præmisit discipulos ad civitatem est in monte

'Bernard (A D 865) says "In descensu etiam de monte Oliveti ad occidentalem plagam ostenditur marmor, de quo descendit dominus super pullum asinæ"

'The "western" slope of Olivet will not fit in with our *style*, but the fact remains that in the ninth century such a stone was shown

'M Ganneau goes on to show that the traditional site of Bethphage was maintained up to the seventeenth century He concludes his paper ("Revue Archæologique," Dec, 1877) as follows "We know, therefore, beyond any doubt, the point where the Crusaders localised the episode to which the name of Bethphage is attached The ruins noticed by M Guillemot not far from the painted stone belong to the Bethphage so-called by the Crusaders Is this mediæval Bethphage identical with that of the Gospel? This is a question quite distinct from the first We know how different are opinions on the site of Bethphage According to some who rely on the Greek text of Luke xix 29, it is placed to the east or the south-east of Bethany, others consider it as identical with the modern village of Silwân, others, again, relying on the authority of the Talmud, make Bethphage a suburb of Jerusalem For my own part, I confess that I ask myself whether Bethphage is not simply the village of the Mount of Olives called Kefr et Tûr I believe this village ancient on account of its name of Kefi, on account of its situation, and on account of the ancient remains that one sees there Kefi et Tûr means the Village of the Mount of Olives, it may formerly have had a designation more personal, which is lost Now the Gospel tells us of an ancient locality whose name has disappeared, it is Bethphage, the Village of the Mount of Olives

'This hypothesis will enable us to explain and understand certain Talmudic passages, which are all clear if one admits that Bethphage marked on the east the boundary of the Sabbatic zone which on every side surrounded the city The Mount of Olives (by which we may now understand a particular point of this mount) was exactly a Sabbath-day's journey from Jerusalem And what point could this be except the village of the mountain which occupied its principal summit and now bears its name?"

'Lieutenant Kitchener's Report

'The road from the Mount of Olives to Bethany crosses a narrow ridge of land which joins the Mount of Olives to the hill above Bethany On this narrow strip ancient tradition placed the site Bethphage, mentioned (Matt xxi 1, Mark xi 1 and Luke xix 29) as the place where our Lord mounted the ass for his triumphal entry into Jerusalem The remains of an ancient chapel have been uncovered, dating probably from the twelfth or thirteenth century

'In the chapel there is an almost square block of masonry or rock covered with paintings, it measures 4 feet 3 inches by 3 feet 6 inches by 3 feet 10 inches high, and its position in the chapel is curious—being on the north side, probably between two columns of the nave, as seen on the accompanying plan.

'This square block is supposed to be either an altar, a shrine, or a portion of the rock cut out and ornamented, being the exact place where our Lord mounted the ass

'The paintings, of which I send you pen-and-ink sketches, are well done, though now much disfigured On the south side is the Raising of Lazarus, on the north are the Disciples Fetching the Ass, on the east there are a number of persons standing in a row, but it is too much disfigured to be recognisable, on the west there is a niche covered by an

arch, which was probably supported by two small columns, below the niche is a portion of an inscription still remaining, several lines have been destroyed

'On the top there was also some design and the traces of an inscription The walls of the small chamber to the south were also painted with a design of squares containing circles, and the walls of the church were painted in a common pattern

'M Le Capitaine Guillemot was the first to visit these remains, and he has made elaborate drawings and copies of the paintings and inscriptions when everything was almost perfect These he is about to publish He was able to read on different parts of the inscription, "Hic est," "Bethphagus," and "Hierusalem"'

The Veil of the Temple

'In pursuit of the hitherto neglected question of the connection of the Phœnicians with the Peloponnese, I have been led to ascertain the existence in the province of Elis of certain facts, customs, and observances which offer a remarkable analogy with what we know of the Phœnicians, and, particularly, of the Hebrews I confine myself in this place to a succinct enumeration of the principal points, full details of which will appear in my forthcoming work, called "Le Dieu Satrape et les Phéniciens dans le Peloponnese"

'1 The Eleans, alone in Greece, cultivated the *byssus*, a textile plant the Oriental origin of which is incontestable Pausanias tell us that the Elean byssus was quite equal in fineness to the byssus of the "Hebrews"

'2 The Eleans were forbidden, for religious reasons, to breed mules, the same interdiction existed for the Jews, as we know It was based on a passage of Leviticus (xix 19)

'3 In Elis, near Lepreos, a city whose name is traditionally explained as derived from the leprosy which *afflicted its earliest inhabitants*, flowed a river anciently called Ἰάρδανος—the same as Jordan

'But it is especially at Olympia, the famous theatre of the Olympic games which have given Elis so considerable a place in Greece, that we are presented with points which strike us at once as resembling observances of Semitic religion

'4 Anointings with oil were practised on the celebrated statue of Olympian Zeus (to preserve the ivory, says Pausanias)

'5 In the temple of Olympian Zeus were certain *βωμοί*, held in extreme veneration, formed by the accumulation of the ashes of victims, and exactly similar to the deposits of ashes coming from the altar of Jehovah—deposits regarded as sacred (Leviticus i 16, iv 12, 1 Kings viii 3, 2 Macc xiii 8)

'6 The women of Elis were absolutely forbidden to penetrate into the sanctuaries of Olympia: they were not to pass beyond a certain limit This is parallel with the Court of Women The women of Elis were also forbidden to be present at the Olympic games and to cross the waters of the Alpheus at certain periods, the whole under pain of death This idea of woman's constitutional impurity, this implacable penalty which sanctioned it, are traits essentially Semitic

'7 The women of Elis, thus kept apart, had ceremonies of their own, on the other hand, which seem based on those of the Phœnicians, those mourners for Adonis and for the solar Tammuz whom Ezekiel (viii 14) shows us in the very Temple of Jehovah "At a certain season," says Pausanias, "at the moment of the setting sun, the women of Elis went to weep

round the empty sepulchre of him whom they called Achilles"—a fabulous Achilles, an Achilles sprung from some Oriental Ἀδωνιασμός, rather than from Homeric tradition

'8 At Olympia, near the Temple of Hera, sixteen women were employed in weaving the *peplos* of the goddess, just as the women wove the sacred tents for Asherah in the Temple of Jehovah (2 Kings xxiii 7, Ezek xvi 16)

'9 At Olympia also was adored the singular Ζεὺς Ἀπομυιος, whose literal prototype is found in Baalzebub, or Βααλ μυῖα of Ekron (2 Kings i 2, 3, 16)

'10 Finally, there was in the sanctuary of Olympia a great woollen veil, of Assyrian workmanship, dyed with the Phœnician purple, given by Antiochus, and executed, perhaps, on the same plan as that great veil of the Temple, of Babylonian texture, the marvels of which have been described by Josephus

'I even venture to ask whether this veil of the Olympian Temple might not have been the very veil of the Temple of Jerusalem carried off by Antiochus IV, the grand pillager of temples

'This conjecture may appear rash at first sight There are, however, certain facts which seem to me to lend to it a high degree of probability

'The first book of Maccabees (i 23, 24) informs us that Antiochus took away from the Holy City "the golden altar, and the candlestick of light, and all the vessels thereof, and the table of the shewbread *and the veil* (τὸ καταπέτασμα) " This is confirmed by Josephus, according to whom Antiochus "did not spare even the veils made of fine linen and scarlet" ("Antiq Jud," xii 5, 2)

'Pausanias said that Antiochus dedicated (ἀνέθηκεν) his oriental veil in the Temple of Olympia

'It was the custom to adorn temples with similar trophies

'But there is more

'Pausanias minutely explains that the παραπέτασμα, or curtain of the sanctuary of Olympia, in place of rising up to the roof as, for instance, that of the Temple of Artemis at Ephesus, was dropped to the ground from above by means of ropes He might have spared himself a good deal of trouble by stating at once that it was not a παραπέτασμα, but a καταπέτασμα (down-curtain), *i e*, he might have used the word always employed by Josephus and in the texts of the Maccabees to designate the Jewish veil St Matthew also says that the veil (κατατέτασμα) was rent, ἄνωθεν εἵως κάτω

'Again, to whom did Antiochus dedicate the Temple of Jerusalem—plundered and defiled by him? To *Olympian Zeus* (2 Macc vi 2) We need not be astonished, therefore, if he hung up the veil of the Jewish Temple in that of the Olympian Zeus Are not always the spoils of the conquered deities consecrated to the victorious deities? (Cf. the sacred utensils of Jehovah consecrated to Chemosh by Mesha, King of Moab)

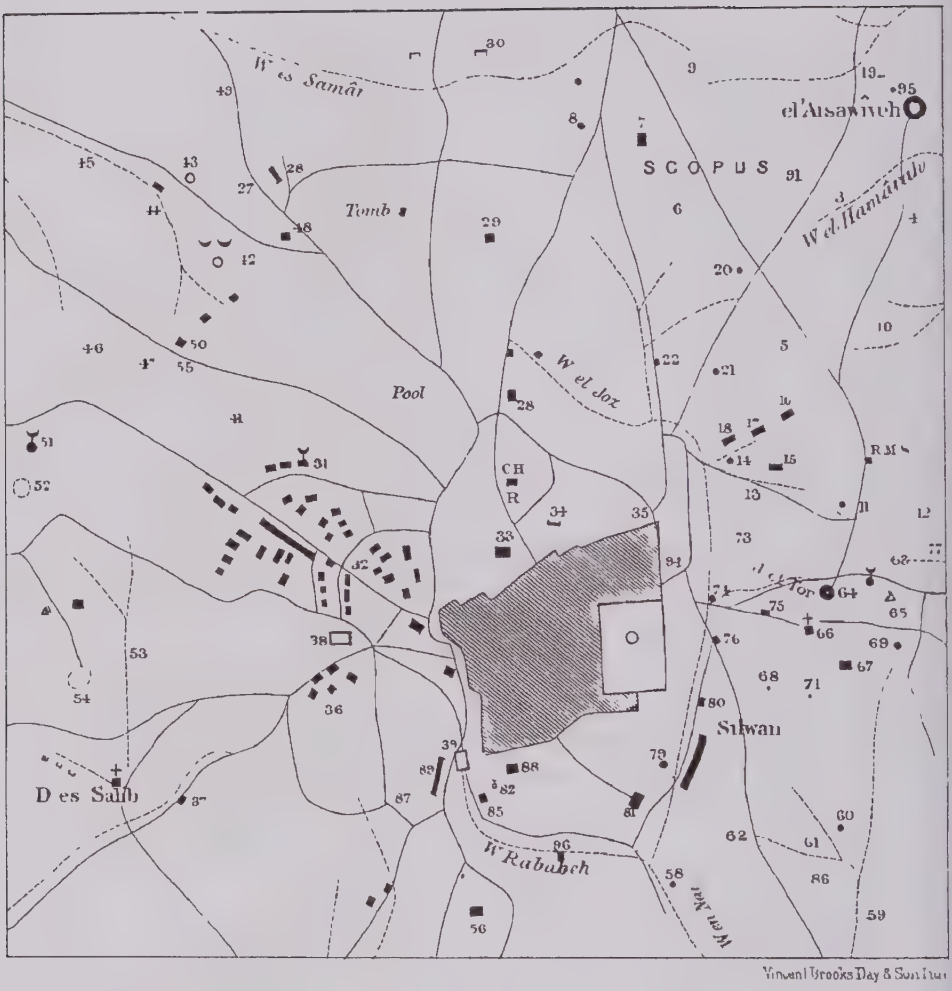
'If the veil of the Olympian and that of the Jewish Temple are identical instead of being similar, the argument which I thought to draw from an analogy to establish an affinity must be set aside On the other hand, we obtain a result important in quite another way There are not two objects to be compared, but two deities placed side by side

'I think the foregoing reflections are of a kind to draw special attention to the excavations now being conducted at Olympia. Should, for instance, any discovery be made bearing upon Syrian rites, religions, and antiquities, I for one should not be surprised'

PART II

NOMENCLATURE ROUND JERUSALEM

1 Wady Umm el 'Amb (or Wady es Samâr)
2 Wady el Hamarah
3 'Ain el Madowerah
4 Râs es Silhm
5 Ras el Madbaseh
6 Ard es Samar
7 Ras el Meshîrif (Scopus)
8 Bir el Meshirif
9 Râs Abu Halawi
10 Khallet el 'Ajuz
11 'Ain es Suwân
12 Râs Umm et Tal'a
13 'Akabet es Suwan
14 Bir el Ka'ah
15 Kusr el Kutb
16 Kusr esh Shehabi
17 Kûsr el Khâtib
18 Kûsr el Ka'ah
19 Kûsr el Mufti
20 Bir eth Thogherah
21 Bir Zeitûnât el Haweileh.
22 Bir er Rasasyeh
23 Sheikh Jerrah
24 'Akabet Sheikh Jerrah
25 Bir el Yehudiyeh (and Tomb of Simon the Just)
26 Bir Sheikh Jerrah (in Court of 23)
27 Tombs of the Judges (or Sanhedrin)
28 Kabûr es Salatân (Helena's Tomb)
29 Rujm el Kehakir
30 Mughâret el 'Anab
31 Sheikh Kâmir
32 El Muskobiyeh (Russian buildings)
33 St Stephen's (Ruins)
34 El Heidhemiyeh (Place of Execution)
35 Kurm esh Sheikh
36. Bir el Huwarah
37 Bir el Kôs
38 Birket Mamilla
39 Birket es Sultan
40 Deir es Salib (Convent of the Cross)
41 Khallet et Tarhah
42 Khurbet el Bedr
43 Khurbet es Salah
44 Khallet el Kusab
45 Bir Abu Shalbek
46 Kurm Ahmed
47 Ras en Nâdr
48 Kusr el Kurmeh
49 Wady Umm Ahmed
50 Kûsi Ishenar (Schneller's Orphanage)
51 Sheikh Bedr
52 Khurbet el Khamis
53 Wady el Wely
54 Khurbet el Khazûk
55 El Hâwieh
56 Jebel Deir Abu Tor (Mount of Evil Counsel)
57 Sheikh Ahmed et Torch (at 56)
58. Bir Eyûb
59 Wady Kadum
60. Bir el Khuhl
61 Wady Deir es Sonneik
62 Batn el Howa
63 Sheikh Selmân el Farsi
64 Kefr et Tor (Village, and Church of Ascension)
65 Russian House on Olivet
66 Pater Noster Chapel
67 New Convent of the Latins
68 Tombs of the Prophets
69 Bethphage Chapel
70 Jebel et Tôr (Mount of Olives)
71 El K'adi (where Christ sat)
72 Rûs Mesâ'adet Sidna 'Aisa.
73 Ahbal el Kibrit
74 Kubr Sitti Miriam (Virgin's Tomb)
75 El Khelweh (the Hermitage)
76 Gethsemane
77 Wâdy es Sahel
78 Silwan (the village of Siloam)
79 'Ain Umm ed Deraj (En Rogel and Gihon)
80 Tantûr Fer'on (Absolom's Pillar)
81 'Ain Silwân (Pool of Siloam)
82 Neby Daûd (the Coenaculum)
83 Wâdy en Nar (Kedron)
84 Wady et Rabâbeh (Hinnom)
85 Hûmmâm Tubariya (Protestant Cemetery)
86 Wady Tubl (by 61)
87 Khûrbet Abu W'air
88 Sheikh el Mensi
89 Almshouses for Jews
90 Zahweileh (Zoheleth at 78)
91 Rujum el Behimeh (near north east)
92 'Akabet el Ghuzlan (near last)
93 Kubbet el 'Abd (by 38)
94 Birket es Sitti Miriam
95 'Arâk et Tireh
96 Hakk ed Dumm (south of 84) Aceldama



JERUSALEM AND ITS ENVIRONS
IN 1882

Showing the Arabic Nomenclature and New Buildings

Scale 2 Inches=1 Mile.

PART II.

THE ENVIRONS OF JERUSALEM.

The following descriptions refer to the exploration of places outside the walls of modern Jerusalem which have been examined and planned down to the year 1882.

The complete Arabic nomenclature of this area, which is comprised within the limits of the Ordnance Survey Plan of the environs of Jerusalem (scale $\frac{1}{10560}$), will be found in the volume of the name lists (pp. 313—320) The nomenclature outside the city was collected by Captain Conder's Survey Party in the summer of 1874 Those names which have no archæological value are omitted in the present paper

'Ain Silwân.

The modern Arabic name of the Pool of Siloam, which is, however, not properly speaking a spring, but a tank fed by the great aqueduct from the Virgin's Fountain ('Ain Umm ed Deraj), and having an intermittent supply consequent on the intermittent flow of that spring Josephus (5 Wars iv 1) also calls Siloam a fountain, but in the Bible it is called a pool (Neh iii. 15). The present pool consists of modern masonry, measuring 55 feet north and south, by 18 feet east and west, and having its bottom at a level 2,086 feet above the Mediterranean The average depth is 20 feet, and on the north an archway 5 feet wide appears, leading to a small vault 12 feet long, in which is a descent from the level of the top of the pool to the level of the channel

supplying it. This vault is modern, and the old mouth of the rock-cut channel has been stopped up on the east side of the present pool, the water now being admitted further west under the vault. The recent explorations of Dr. Guthe prove that the Pool of Siloam was originally much larger and cut in rock. On the east it probably extended to the present rocky scarp, in which a channel is now cut communicating with the old pool, formed by a strong masonry dam below the Pool of Siloam, at the mouth of the Tyropœon, where it opens into the Kedron valley. The date of the masonry of this dam, which is about a hundred yards south-east of the Pool of Siloam, is unknown, but it is extremely massive, and probably of great antiquity. The present Pool of Siloam is, in fact, a small area kept open by the modern retaining walls in the middle of the great ancient rock-cut pool, which has been filled up with rubbish. The extent of the original pool cannot be ascertained without further excavation. Doctor Guthe's explorations appear, however, to indicate an original width for the pool of about 95 feet east and west.

The tunnel which connects the Pool of Siloam with the Virgin's Fount has been passed through by Dr. Robinson and Colonels Wilson and Warren, and recently revisited (in 1881) by Captain Conder and Lieutenant Mantell. It was in this tunnel that an ancient Hebrew inscription was accidentally discovered in 1880, by some Jewish boys who were attempting to go through the tunnel. The inscription is incised on a rock tablet about 5 yards from the mouth of the channel. The tablet is about 27 inches square, and the inscription, in six lines, occupies the lower portion, the top of the tablet being only about a yard above the bottom of the channel, which is here some 2 feet wide and 11 feet high. The tablet is on the right hand of an explorer entering the tunnel from the Siloam end.

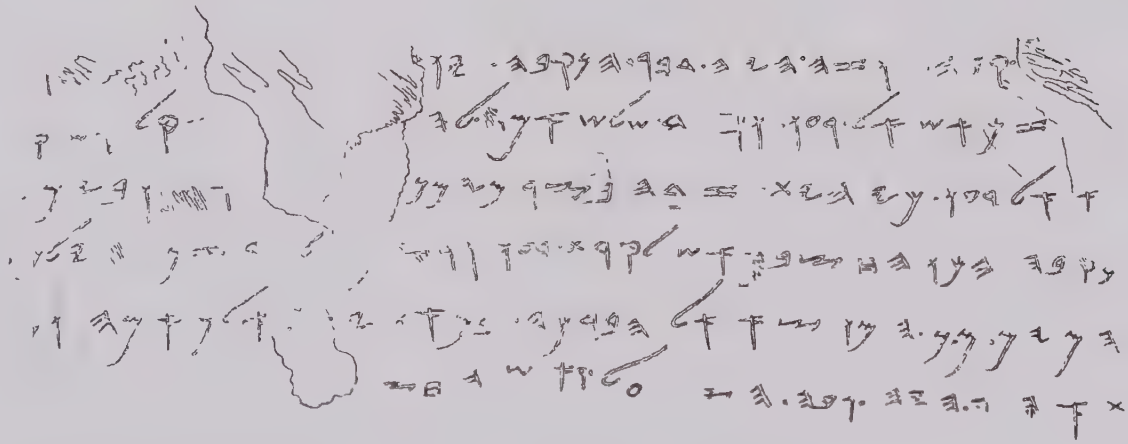
The new inscription was reported by Herr K. Schick, and visited early in 1881 by Professor A. H. Sayce, who translated the text. The clearness of the inscription was much improved by Doctor Guthe, who, in the same year, washed the tablet with a weak acid solution, dissolving the deposit of lime which had formed in the incised characters, but without injuring the hard, smooth rock in which they are cut.

The doubtful letters of the text were carefully examined by Captain Conder and Lieutenant Mantell, and Professor Sayce was thus enabled

SILOAM INSCRIPTION,

TRACING FROM A SQUEEZE, TAKEN 15TH JULY, 1881,

BY LIEUTS. CONDER AND MANTELL, R.E.



to improve his original rendering in a few points The final result of these various labours is the transliteration and translation of Professor Sayce given beneath. A cast of the inscription in plaster of Paris was obtained by Captain Conder for the Palestine Exploration Society, and is remarkably successful, giving even the most obscure letters very faithfully.

TRANSLITERATION OF THE TEXT

First line

- - נקבה וזה היה דבר ה נקבה בעוד - - - - - - עלו

Second line.

ה גרזן אש אל רעו ובעוד שלש אמת לה - - - - קל אשק

Third line

- - א אל רעו כי הית זדה בצר מימן - - - - - ו בים ה

Fourth line

נקבה הכו ההצבם אש לקרת רעו גרזן · על גרזן וילכו

Fifth line

המים מן ה מוצא אל הברכה במאתים אלף אמהו - -

Sixth line

ת אמה היה זבה בצר , על ראש ה חצב - -

This transliteration depends on a careful comparison of the copies of Professor Sayce and Doctor Guthe with the cast. The following is the translation by Professor A. H. Sayce·

(1) (Behold) the excavation Now this (is) the history of the tunnel while the excavators were still lifting up

(2) The pick towards each other, and while there were yet three cubits (to be broken through) . the voice of the one called

(3) To his neighbour, for there was an (?) *excess* in the rock on the right. They rose up . . they struck on the west of the

(4) Excavation , the excavators struck, each to meet the other, pick to pick. And there flowed

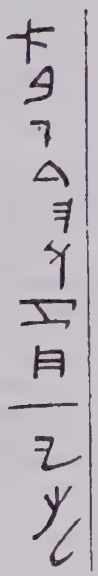
(5) The waters from their outlet to the Pool for a thousand two hundred cubits , and (?)

(6) of a cubit, was the height of the rock over the head of the excavators

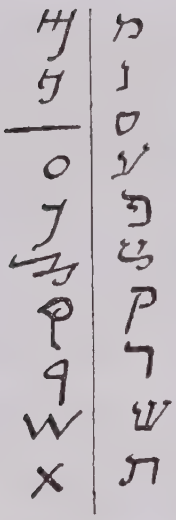
As regards the date of this inscription, Professor Isaac Taylor points out that the *Koph* and *Tsadi* approximate to the sixth century forms of the Eshmunazar sarcophagus, and the *Aleph* and *Mim* are like those of the seventh century Phœnician inscription of Abu Simbel The inscription thus appears to belong to the later period of the Hebrew monarchy, and may very well be considered to agree with the Biblical account of Hezekiah's preparations for Sennacherib's siege (Ecclus. xlviii. 17, and 2 Chron xxxii 30) Professor Sayce, comparing the alphabet of the inscription with those given by Euting, stated that the text must belong to the period between the eighth and sixth centuries B C He has, however, subsequently proposed to recognise the inscription as being as old as the time of Solomon.

The various discussions which arose concerning this text before an accurate cast and copy of the letters had been obtained need not here be noticed The general accuracy of Professor Sayce's first translation was confirmed by the subsequent copies of the inscription

ALPHABET OF THE SILOAM INSCRIPTION



א	Resembles the form on some of the Jewish coins
ב	As on Moabite stone
ג	As on Moabite stone, nearly
ד	As on Moabite stone
ה	As on Moabite stone
ו	Approaches the Samaritan form
ז	Approaches the form on Moabite stone
ח	Three bars as on Jewish coins
ט	*Wanting*, as also on Moabite stone
י	As on Moabite stone
כ	As on Moabite stone
ל	As on Moabite stone, but very long



As in Phœnician of seventh century

As on Moabite stone and on coins

Wanting

As on Moabite stone

Approaches the form on Moabite stone

Peculiar, but well-defined

Peculiar Approximates to sixth century form

As on Moabite stone

As on Moabite stone

As on Moabite stone

The following remarks on the doubtful parts of the text were sent home by Captain Conder in August, 1881, before Professor Sayce's final translation of the inscription was published —

'Our method was to produce a *fac-simile* founded on a careful squeeze, and distinguishing the sculptured strokes from natural cracks or dents, by pencilling the former on the squeeze itself We then compared the whole again with the text, reading letter by letter, and throwing the light on each letter in turn from every side

'The text consists of six lines, occupying a space of 23 inches by 7½ inches, on the lower half of the tablet The letters are from half an inch to three-quarters of an inch in height The first and second lines are injured on the right, and a large deep crack extends all down the tablet near the left hand extremity, breaking the three upper lines, and partly mutilating the fourth The first line is illegible to the left of this fissure, the surface being rough and covered with cracks The fifth line does not extend the whole length of the longer lines, occupying only about 16 inches

'There appear to have been originally about 190 letters, of which 170 are now more or less clearly recoverable The text is thus not quite as closely written as the famous Marseilles tablet The letters are carefully formed, and some of the minor peculiarities, such as the small hooks at the right hand extremities of the two horizontal strokes of the *Zain*, are repeated in each repetition of the letter The size of each letter is also much the same on each repetition, the vertical lines are broad, but not deep, the horizontal strokes are narrow, but very sharply cut

'We revisited, on the 4th August, 1881, the rock-cut channel, and again spent three hours in examining the text.

'The result is that after several independent readings, we do not feel able to make any alteration in the copy which I sent home on the 19th ult., with the exception of one doubtful letter in the first line. It seems to us that this copy may be taken as representing all the letters clearly traceable in the present condition of the inscription, and although, when guided by Professor Sayce's copy, we were able in some cases to distinguish traces of other letters, we were not always able to make these agree entirely with the forms which he has given.

'We are able only to add one letter to those given by Professor Sayce, namely a *Koph*, which appears pretty distinctly at the end of the second line. We still are obliged to omit twelve letters which are no longer traceable (to our eyes), and our copy differs in eighteen letters from that of Professor Sayce, notably in two passages which occur in the third and the sixth lines. It must be remembered that I speak of the present condition of the text, as we had no opportunity of examining it very minutely before it was cleaned with acid. Dr Guthe's copy, taken before this operation was performed, may, however, show letters not now traceable, although, as far as we can judge, the inscription has not been in any way damaged by the removal of the lime deposit.

'In our recent visit we were obliged to stand each for an hour and a half knee-deep in water, and we could not but admire the accuracy of Professor Sayce's results, obtained under conditions even more unfavourable than those of our last visit. His published copy is, however, not a *facsimile*, the spaces between the letters not being always the same as those given by the squeeze, and the form of many of the characters not being exactly that given by the text. The inscription occupies a space 23 inches long by 8 inches in height, the top being 14 inches from the upper surface of the tablet, and the bottom of the sixth line 5 inches above the lower border of the tablet, which is 27 inches square.

'As regards the forms of the letters, I may add a few notes to those in my former communication.

'The *Aleph* is written throughout in a uniform manner, and the shape does not appear to us to be exactly that given by Professor Sayce, which resembles the *Aleph* of the Moabite Stone, but rather the form of an inverted F with a spur—such as is found on Jewish coins.

'The *Vau* appears also to be written throughout with a head formed by three strokes. We are unable to find a single instance in which the head of the letter remains, and in which only two strokes occur. In all the best preserved specimens the central stroke has at the end a cross stroke or *shoe*, which makes it specially conspicuous.

'The *Zain*—as now seen very clearly—has also a uniform character, and is not formed as shown on Professor Sayce's copy, no curved line occurring to join the horizontal bars. The hooks at the right-hand end of these latter I have already noticed in a former letter.

'The *Tzadi* also does not seem to be formed as shown in Professor Sayce's copy. The letter is only found five times on the inscription, and in three cases it is imperfect. In the two perfect instances there is no loop joining the bars, but the latter resembles a W inverted with *shoes*.

'These peculiarities have no doubt become clearer since the inscription was cleaned. The length of the stroke of the *Lamed*, and its inclined position, are also details which seem worthy of notice.

'The form of the *Mem* is also an important consideration. The cross strokes are very sharply cut, and although at a first glance the letters seem to have a W form for the head, yet when minutely examined they all prove to be cut with a bar and cross strokes. The *Nun* is also formed in a similar manner throughout.

'We may now proceed to consider the differences which appear in the copy made from a squeeze by Lieutenant Mantell and myself, as compared with Professor Sayce's copy. The results, which are given below, are derived from four independent readings of the inscriptions, two taken by me, and two by Lieutenant Mantell. The position of the letters in our tracing recently sent home is obtained by means of the squeeze, and this serves in one or two instances to check the readings, and to determine the number of letters missing with tolerable certitude.

'*First Line*.—At the commencement of the inscription the original surface of the rock is still preserved, though somewhat cracked. The first *Nun* is very imperfect, and we were quite unable to trace any distinct letters preceding it, though indications of what may have been a *He* might be conjectured to exist.

'It is very doubtful whether one or two dots follow the word נקבה. There are so many small holes in the stone that the dots between the words are in a great many cases very doubtful.

'The *Daleth* in the word דבר is not very clear, but its form and size resemble those of the *Daleth* immediately beneath it in the second line, the horizontal stroke being very slightly curved.

'The reading בעור given by Professor Sayce appears to us to be still legible, but the third letter only is distinct, being a large and well-formed *Vau*. The first and fourth letters seem to be unusually small.

'The *Vau* at the end of the line has no head, and never apparently had one, the rock being quite smooth. We thought that we could distinguish traces of *Lamed* and *Ain* preceding it, as read by Professor Sayce, but their existence seems extremely problematical. There is room for two such letters, but to the right of them is a hole, and we were unable to trace the *Beth* shown by Professor Sayce immediately to the left of the great crack.

'With these exceptions, the reading of the text in this line is remarkably clear, and (save as to the form of the letters) is the same as given by Professor Sayce. Our copy, however, supports Mr Pilter's reading נקבה, and after carefully re-examining the first letter of this word, we felt sure that it could never have been a *Mem*.

'*Second Line*.—The traces of a *He* will be found in our copy at the beginning of this line, and after minute examination, we were able to find the remains of a *Gimel* following it, and to distinguish a *Resh*, well formed, but much worn, to the left—thus confirming the reading הגרון. The last two letters and the dot are quite clear.

'After the word רעו, there is a dot and a very clear *Vau*. Between this and the *Daleth* there is room for two large or for three smaller letters—as shown by Professor Sayce. The letters which he shows we were, however, unable to recognise, and the first two seemed to us most to approach בע, though so indistinct and confused by cracks as to be very doubtful. There would also seem to be the tail of a letter *Mem*, *Nun*, *Caph*, or *Pe* to the left of those two.

'The *He* in the word *Amah* is, as I have previously noted, almost indistinguishable, from a crack in the rock. The next two letters are clear, but beyond these, where Professor Sayce shows כה, we are only able to trace what looks like the head of a *Vau*, and the loop of either a *Beth* or a *Resh* following it.

'Beyond the great crack in this line, there is a *Koph* as shown by Professor Sayce, and to the right of this three strokes, which seem most probably to have belonged to an *Aleph*

The *Lamed* after the *Koph* seems to us quite clear, as well as the *Shin* and the second *Koph* with a dot after it (the last letter is not given by Professor Sayce)

'In all the distinct and several of the doubtful letters of this line, we are therefore able to confirm the readings of Professor Sayce.

'*Third Line*.—The first *Aleph* should be preceded by a *Beth*, but there is now a small deep hole in the rock where this letter (marked as doubtful by Professor Sayce) would have occurred, and no trace of it is visible.

'After the distinct word רעו we make a great difference from previous copies. It is to be hoped that our reading may render the translation of this puzzling passage easier. The words, according to us, should stand רעו כי היה זרה. The *Caph* and the *Yod* seem very clear. The double stop after the *Tau* is not, however, very certain. Lieutenant Mantell was inclined to think that an *Ain* might have existed here, which Professor Sayce also shows with a query. The *Daleth* in the last word of the group is also not quite certain. There is a horizontal stroke beneath it, but the rock is smooth and well preserved, and no trace of a vertical stroke exists. Nor would the shape of the *Beth* thus formed, if it existed, be the same as that of other *Beths* in the inscription.

'Professor Sayce has divided the letters מימן further on in this line into two words by a dot, but we were unable to make certain of this division. The two letters which follow are much defaced, and the rock is covered with a network of small cracks in this part, which would make the cast almost entirely unintelligible. I was inclined to think that I could trace the *Koph* shown by Professor Sayce, and that it may have been followed by a *Beth*. Lieutenant Mantell would, however, give a *Resh*, with part of the tail of another letter.

'Beyond the great crack on the left, we read with Mr. Pilter ובימה, and after a very close examination we could clearly determine that the last letter but one is not a *Nun*, but certainly a *Mem*, with the horizontal stroke and cross-bars. The only letter which we are unable to distinguish to the right of this word looks like the remains of an *Aleph*. There may have been a *Lamed* between this and the *Vau*, but we regard both these letters as highly problematical. There is room for a third letter before the *Vau*.

'*Fourth Line*.—The second word is read הכו by Professor Sayce, but the first letter of the word seems to us clearly to be a *He* and not a *Cheth*. There is a deep crack in the stone at this point, which, before the deposit was removed, would have given the left stroke of the *Cheth*, but as now seen, it appears to be clearly a natural and not a sculptured line. The surface of the stone being uninjured, we could ascertain that there had never been any "horn" on the left at the end of the bars of the *He*.

'By the aid of the copy we are able to distinguish the *Ain* preceding the *Lamed* in the sentence גרון על גרון. The first *Zain* is, however, imperfect, and the second *Gimel* cannot be distinguished. The *Vau* succeeding these words is fairly clear, but only the middle stroke of the head can be seen, with its characteristic *shoe* on the end of the stroke. The final *Vau* at the end of the line we could not see clearly, but a trace of its vertical stroke may perhaps be recognised.

'*Fifth Line*.—The second *Mem* has the same form as all the others in the text. We are quite unable to find any remains of the *Yod* given by Professor Sayce in מוצא, nor does there seem to be any space for it between the *Tzadi* and the *Aleph*. The *Tau* in במאתי seems to us to be very doubtful, though strokes exist which may have belonged to such a letter. It should be noted that between this word and the next there is more space than is shown in

Professor Sayce's copy The dot is at some distance from the *Yod*, but even then there is fully room for another letter before the *Aleph* The surface of the rock is, however, injured in this place The last two letters of this line appear to us to read וֹן, though the last may be *Mem*, as it is very imperfect and indistinct

'*Sixth Line.*—The third letter read *Cheth* by Professor Sayce is very indistinct, and may have been a *He*. The letters הוה appear to us to be now quite distinct, and unmistakable, although Professor Sayce reads quite differently The letters זבה also seem to us to be distinct, and the letter which follows seems more probably a *He* than a *Cheth* The *Tzadi* which follows is imperfect, and the *Resh* or *Beth* next in order cannot be read as now seen The final letter of the inscription should apparently be *Beth*, but the surface of the rock is here so damaged as to make it impossible to distinguish any of the three letters which Professor Sayce places after the last *Tzadi*, for there is a hole in the stone at this point.

'Such is a summary of our observations, which have been pursued entirely without consideration of anything beyond the present appearance of the text The main results which seem likely to be of some service are those which concern the forms of the letters, and the difficult readings of the third and sixth lines.'

It will be noticed that most of the alterations suggested in this report have been adopted by Professor Sayce

As regards the length of the aqueduct mentioned in the inscription, it should be remarked that Professor Sayce has finally agreed to the translation, which gives a total of 1,200 cubits The actual length of the tunnel is about 1,760 feet from the Virgin's Spring to Siloam A distance of 1,200 cubits of 16 inches would measure 1,600 feet, and 18 inches gives 1,800 feet. We may thus, perhaps, obtain a rough approximation for the Jewish cubit

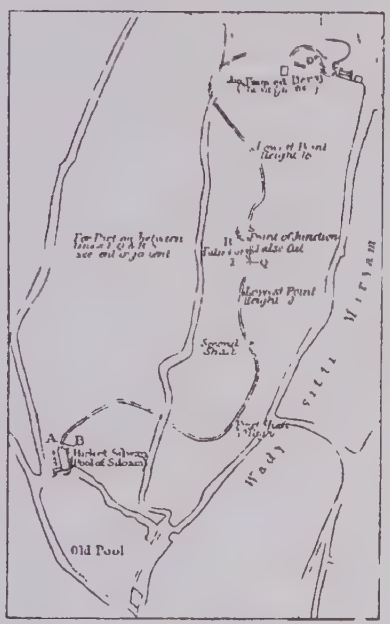
The church over the Pool of Siloam, mentioned by Antony of Piacenza (600 A.D.), may perhaps account for the two pillar stumps standing in the modern pool. The intermittent flow of Siloam is mentioned by the Bordeaux Pilgrim and by Jerome in the fourth century. The tunnel to the Virgin's Fountain is described by Quaresmius in 1625 A.D A certain Pater Julius had passed through it a few years earlier Doctor Robinson explored the channel in 1838 A D ('Biblical Researches,' i 338) The following is the account given by Colonel Warren of his examination of the aqueduct.

'The question of the origin of the Virgin's Fount aqueduct is a very interesting one, it appears to me to have been constructed in the following manner.

'First, an intermittent fountain on the west side of the Kedron issuing into the valley. When the Assyrians were expected by King Hezekiah, the fountains outside the city were

stopped and the water brought inside This applies completely to this fountain, for we find a canal cut in the rock leading due west till it is well under the hill of Ophel, then a shaft down to this canal with a place scooped out at bottom for water to lie in, and an iron ring at top to tie the rope of the bucket to, leading from this shaft is a great corridor cut in the rock, and then also a staircase leading up until it is under a vaulted roof, the exit being on the hill of Ophel, a few feet from the ridge, and almost certainly within the ancient walls Below the vaulted roof is another rock cut shaft shown on the illustration, but this was only examined to a depth of about 35 feet

'Apparently after this had been in use for some time, it was considered insufficient for the



supply of the city, as the receiving hole at the bottom of the shaft is so small and the corridor so confined for a large number of people, and so a rock-cut channel was cut through the hill 1,700 feet long, to carry the water into the Pool of Hezekiah, which already received the overflow water from the Gihon Pools This pool was probably without the wall, but being at the mouth of the valley it would be surrounded on three sides by the outer wall, and would thus be as secure for the people as though it were inside, at the same time it would act as a wet ditch to protect a very vulnerable part of the fortress This passage from the Virgin's Fountain to Siloam has been examined by several gentlemen, but to most of them some accident happened, so that only measurements were taken Le Frère Liévin (author of the very

useful French Guide to the Holy Land) apparently took angles with an ordinary compass, and I found his plan of the canal, which he lent me to compare with mine, to be very correct

'In the month of December, 1867, I made a thorough examination and survey of the passage leading from the Virgin's Fount to Siloam We entered from the Siloam end, so as to have as much clean work as possible For the first 350 feet it was very plain sailing, the height of the passage sloping down from 16 feet at entrance to 4 feet 4 inches, the width being 2 feet, the direction a wavy line to the east At 450 feet the height of passage was reduced to 3 feet 9 inches, and here we found a shaft leading upwards apparently to the open air This might be made use of to great advantage by the owners of the soil overhead From this shaft the passage takes a north-easterly direction, and at 600 feet is only 2 feet 6 inches high Our difficulties now commenced Sergeant Birtles, with a Fellah, went ahead, measuring with tape, while I followed with compass and field-book The bottom is a soft silt, with a calcareous crust at top, strong enough to bear the human weight, except in a few places, where it let us in with a flop Our measurements of height were taken from the top of this crust, as it now forms the bottom of the aqueduct, the mud silt is from 15 inches to 18 inches deep We were now crawling on all fours, and thought we were getting on very pleasantly, the water being only 4 inches deep, and we were not wet higher than our hips Presently bits of cabbage-stalks came floating by, and we suddenly awoke to the fact that the waters were rising The Virgin's Fount is used as a sort of scullery to the Silwân village, the refuse thrown there being carried off down the passage each time the water rises The rising of the waters had not been anticipated, as they had risen only two hours previous to our entrance At 850 feet the height of the channel was reduced to 1 foot 10 inches, and here our troubles began The water was running with great violence, 1 foot in height, and we, crawling full length, were up to our necks in it

'I was particularly embarrassed one hand necessarily wet and dirty, the other holding a pencil, compass, and field-book, the candle for the most part in my mouth. Another 50 feet brought us to a place where we had regularly to run the gauntlet of the waters The passage being only 1 foot 4 inches high, we had just 4 inches breathing space, and had some difficulty in twisting our necks round properly When observing, my mouth was under water At 900 feet we came upon two false cuttings, one on each side of the aqueduct They go in for about 2 feet each I could not discover any appearance of their being passages: if they are, and are stopped up for any distance, it will be next to impossible to clear them out in such a place Just here I involuntarily swallowed a portion of my lead pencil, nearly choking for a minute or two. We were now going in a zigzag direction towards the north-west, and the height increased to 4 feet 6 inches, which gave us a little breathing space, but at 1,050 feet we were reduced to 2 feet 6 inches, and at 1,100 feet we were again crawling with a height of only 1 foot 10 inches We should probably have suffered more from the cold than we did, had not our risible faculties been excited by the sight of our Fellah in front plunging and puffing through the water like a young grampus At 1,150 feet the passage again averaged in height 2 feet to 2 feet 6 inches, at 1,400 we heard the same sound of water dripping as described by Captain Wilson, the Rev Dr Barclay, and others I carefully looked backwards and forwards, and at last found a fault in the rock, where the water was gurgling, but whether rushing in or out I could not ascertain. At 1,450 feet we commenced turning to the east, and the passage attained a

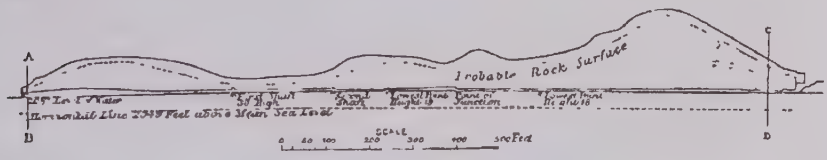
height of 6 feet, at 1,658 feet we came upon our old friend, the passage leading to the Ophel shaft, and, after a further advance of 50 feet, to the Virgin's Fount. Our candles were just becoming exhausted, and the last three angles I could not take very exactly. There were fifty seven stations of the compass. When we came out it was dark, and we had to stand shivering for some minutes before our clothes were brought us, we were nearly four hours in the water. I find a difference of 42 feet between my measurements and those of Dr Robinson, but if he took the length of the Virgin's Fount into account, we shall very nearly agree.

'The discovery of a shaft leading down to the water of the Virgin's Fount threw considerable light upon the object of the rock-cut canal leading from that fountain to the Pool of Siloam, and proved that it could not have been constructed for the purpose of conducting away the refuse and blood from the Temple.'

The following is the report sent home by Captain Conder of his visits to the aqueduct on the 10th and 22nd November, 1881.

'Jerusalem, *1st December*, 1881.

'The details recorded in the Siloam inscription concerning the great conduit, seemed to render it expedient to revisit the channel, in order to search for the point of junction between the two working parties, as well as to ascertain whether any other inscribed tablets might exist in other parts of the tunnel, or whether any marks connected with original measurements might remain.



'Lieutenant Mantell, Mr Armstrong, and I therefore visited the tunnel on the 10th November, and spent nearly five hours in it, crawling from one end to the other, and measuring carefully, with a chain and a prismatic compass, the whole length between the Pool of Siloam and the upper spring (En Rogel, Gihon in the Valley, Bethesda, 'Ain Umm ed Deraj, or the Virgin's Fountain, as it is variously called).

'We found less difficulty than Captain Warren experienced, because the level of the water has been lowered, and the overflow of the upper spring does not occur often in autumn. We were nevertheless very anxious while employed in the central section of the tunnel, where the height is only about 19 inches for some 20 yards, the breadth being only about 2 feet; for if the waters were to rise here (when the overflow occurs) to a height of little over a foot, it would be almost impossible to escape drowning. We were unable to ascertain when the water was expected to rise, or the height to which it attains, but fortunately no overflow took place during the five hours which we spent in the tunnel, and we suffered only from the discomforts of mud and leeches and wet clothing, with the fatigue due to crawling so long in a cramped position, occasionally over stones or sharp fragments of broken pottery.

'The measurement which we obtained with a chain (afterwards corrected by the standard) gives a total length of 1,706 8 feet between the Siloam end of the tunnel and the place where it enters the cross passage to the Virgin's Pool, thus agreeing within 1 2 feet with Colonel Warren's total of 1,708 feet, and proving that his conjecture as to Robinson's measurement must be correct, and that the latter authority includes in his total of 1,758 feet that portion of the cross passage which leads from the Siloam tunnel to the back of the Virgin's Pool, and which measures 50 8 feet by the chain

'The accompanying plan will be found to agree with that of Colonel Warren The section is made from measurement of the height of the channel in different places, taken by us at frequent intervals where a marked alteration occurs The surface is shown in accordance with the intersections along the canal of the contours shown on the Ordnance Survey, and the supposed rock surface agrees with Colonel Warren's "Rock Contours on Ophel," checked in one place by an actual measurement of the rock surface, which we have now taken in the vertical shaft leading up from the roof of the tunnel

'We were, however, not completely satisfied with the results of our first visit, and accordingly, on the 22nd November, Lieutenant Mantell and I revisited the tunnel with a view of ascertaining the point of junction between the two working parties, and of searching for measurement marks on the walls

'We entered from the northern end, and had just commenced operations, when a shout from our servant warned us that the waters were rising

'When we first entered there was not much more than a foot depth of water in the pool, but the rush of water was now very rapid, and the depth increased just after we had reached the foot of the steps which lead down to the pool, to 4 feet 7 inches The sound of the current pouring down the tunnel was distinct, and the depth of the water in the channel, as we found afterwards, was somewhat over 9 inches, so that before the level had been lowered at the Siloam end the passage of the tunnel must always have been a very dangerous undertaking, and, indeed, might still prove so to an explorer caught by the overflow in the lowest part of the passage near the centre

'On our second visit we remained four hours in the tunnel, and inspected both walls very carefully, from the northern entrance to the place where we now suppose the junction of the two working parties to have occurred I think we may state with confidence that there is no tablet similar to that now famous, to be found in any other part of the tunnel, and that there is no other inscription There is, indeed, no place fitted like that where the existing tablet has been found, because the tunnel is quite dark except at the mouth, and is for the greater part of its length so low that it would be extremely difficult, and often impossible, to carve an inscription

'As regards the existing tablet, I may remark that I have examined it again very closely, and feel convinced that the inscription has not been in any way damaged by the application of hydrochloric acid to remove the lime deposit which had filled in the letters. We have copies by Dr. Guthe, taken both before and after the cleaning of the inscription, which serve to show that no bad effect resulted from the repeated washings, and the rock surface is still quite firm and hard, showing no signs of rottenness or chipping I cannot but think that the letters which Professor Sayce put down, and which cannot now be discovered on any of the squeezes or casts, were not actually existent in the rock, but were merely marks formed by the lime deposit, and thus removed by the acid Having seen the tablet before the acid

was applied, I can add my testimony to that of others as to the entirely different aspect which the inscription presented before and after cleaning Before cleaning it resembled a rude scrawl of uncertain shapes, while it is now seen to have been carved with great care, in regular lines, and with constant forms for every letter The copy published in the "Quarterly Statement" for April, p. 70, contrasted with that given in October, p. 286, gives in fact a very fair idea of the difference which was made by cleaning the tablet

'The cast which has now reached England is fortunately so good that but little room for dispute can be left It appears that the text must originally have consisted of about 190 letters, of which 171 are recoverable This number exceeds that which was first given in Professor Sayce's copy, the total of which was 169 letters It seems, therefore, clear that no letters have been lost in the process of cleaning

'The cast and squeeze will be found to agree with Professor Sayce's copy in 151 out of 169 letters It is therefore clear that, practically, Professor Sayce was able, in spite of the great difficulties which he encountered, to transcribe correctly the great bulk of the inscription, and thus was the first to give the reading which in the main has been accepted. In his latest copy he has corrected 13 letters out of 18, in which he differed from the squeeze and the cast, and has added one of the two missing letters The points of dispute, so far as the letters are concerned, are thus reduced to five letters which are doubtful, and two letters which appear on the cast but were not sent home on the squeeze, or noticed in the accompanying report

'I have also compared the cast and my own squeeze with Dr Guthe's copy, which is the best which has been made, with the exception of the cast Dr Guthe's copy agrees with ours in every respect He has, however, shown six more letters than we were able to recover, and all six are correct according to the cast Indeed, Dr Guthe's copy appears to be perfect, with exception of the omission of two letters in the first line, which will be discovered on the cast

'The important details which will be elucidated by the cast are as follows: In the first line Professor Sayce and Professor Socin read הנקבה בעוד, which proves to be correct In the fourth line Professor Sayce reads אל, but Professor Socin על It will be seen from the cast that Professor Socin is right There are, of course, many other minor points on which the cast throws much light, confirming the squeeze in a very satisfactory manner In the fifth line there is no doubt room for the disputed letters in the reading במאתים ואלף but I have not been able to find any traces of the ם on either squeeze, cast, or stone, and it seems highly probable that a fissure in the rock here existed at the time when the inscription was cut

'The two letters הן at the beginning of the inscription, which Professor Sayce adopted from Mr Pilter, I have never been able to find on the stone, although the original surface is preserved, nor have I been able to find the letters (ה)ז at the end of the inscription, which are also absent from Dr Guthe's copy Possibly these, and the disputed ה in the second line, may have been marks due to the lime incrustation, and not actual letters at all

'I may now proceed to describe the reasons which induce us to suppose that we have been able to fix the exact point of junction of the two working parties, in a position which exactly

SILOAM TUNNEL
CENTRAL PORTION ENLARGED
TRUE NORTH
Plan
Point of Junction
Junction
Enlarged Section at AB
shewing Junction in Elevation
Scale, 3 ft to 1 in. (1/36)
Inches 12 6 0
1 2 3 4 5 Feet
Longitudinal Section
Level of Water
Point of Junction
Scale 15 ft to 1 in. (1/180)
Feet 10 5 0 10 20 30 40 50 60 70 80

agrees with the inscription, according to Professor Sayce's latest translation ("Quarterly Statement," October, 1881, p 284) For this purpose we have prepared an enlarged plan and section of the central part of the tunnel, where a remarkable S shaped contortion occurs

'At the points *a*, *b*, *c*, *e*, *f*, *g*, *h*, and *i*, certain *set backs* will be observed in the walls of the passage, which indicate a sudden change in direction on the part of the excavator They are, indeed, false heads, abandoned apparently from the conviction that the passage was not going in the right direction In the case of *h* and *i*, however, which are out of the general direction, and continued further, these recesses may have served as sidings, allowing two excavators to pass one another, which would be impossible without them

'The important point, however, to observe is that some of these headings point up channel, and some point down, and this not without a system, for while *a*, *b*, *c*, *e*, point down, *g*, *h*, *i* point up Similar headings occur in other parts of the tunnel, but they always agree with the rule thus observed, those which are between the Virgin's Fountain and the point *a* pointing down stream, and those between *i* and Siloam pointing up stream

'Each of these headings has a rounded top, such as would result from the excavation of the rock with a pick, by a man working with his face to the front It shows that on turning aside from the heading he left the roof unfinished, in just the form which would result from the swinging of a pick in a curve, which—as a moment's reflection will convince the reader —is the shape natural to an unfinished excavation Looking at the plan then, we see that an excavator facing *down stream* was working at the headings *a*, *b*, *c*, and was three times induced to work away further to his right Looking at *f*, we see an excavator working up stream and induced to turn to his right We see, moreover, that the point *e* might have been the actual point where the channels met, as there is a slight set back down stream within 2 feet of the set back *f*, up-stream

'Now on looking at the section and cross section, it will be seen that there is a sudden difference of level in the roof of the channel at this point

'Within a distance of 2 feet 6 inches it falls from 4 feet 8 inches to 3 feet 7 inches, and a sort of rim occurs where the lower channel (up-stream) joins the more lofty down-stream excavation

'In fact, the general appearance of this part of the tunnel, looking up-stream from *f*, is that of a smaller drain opening into a main drain, and would of itself suggest that this is the point of junction, without considering the testimony of the headings It may, therefore, I think, be considered certain that the place of junction was at the point *e*, or 944 feet from the mouth of the tunnel, and consequently 812 8 feet from the back of the Virgin's Fountain

'This discovery agrees in a remarkable manner with the wording of the inscription. In the directions which are indicated by the headings at *a* and *f* the two parties were working nearly parallel to one another, and might have passed each other without joining, having a thickness of 7 feet of rock between, those in the up stream channel being to the right or east of those in the down-stream tunnel Each, therefore, began to turn to his right, and those in the up-stream channel did so most rapidly The shape of the cutting at the point *d* gives evidence of a very complete change of axis. This is not, as might be supposed from the plan, an up-stream heading, conflicting with what has been said before, for the roof of the tunnel at *d* is curved on the *side* and not at the *end* of this set back, showing that the

workman, after leaving the false headings *a*, *b*, *c*, began to widen the channel on his right, facing for a short time to the side instead of to his front The little buttress thus left was never cleared away, but remains to give its evidence of the method of excavation of the tunnel

'The inscription (line 2) tells us that *three cubits* remained to be broken through, when it was discovered that there was an "excess in the rock to the right" Now if we consider the down stream party to have worked to *e*, it will be seen that the party at *d* were just three cubits of 16 inches from them, when they discovered their excess, and began to cut away the rock on the right It was this which was done according to the text (line 3), for they "struck on the west"—that is, facing west, just as we have seen the excavator at *d* must have faced The party at *e*, in the meanwhile, seem to have stopped working, which they would naturally do, to avoid injuring, or being injured by, the others when the pick struck through the last dividing partition of rock Again, in the last line, we read that "three fourths [?] of a cubit was the height of the rock over the head of the excavation" If this be the correct reading, it is remarkable that the difference of height of the two channels at the point of junction is just 13 inches, or close upon three-fourths of a cubit of 16 inches.

'Unfortunately, however, the text is deficient just in the place where the number occurs, and it appears, according to Professor Sayce, that the word אמה is used as a plural it may, therefore, be found that the measurement recorded in the inscription refers to something else The words "height of the rock over the head of the excavators," strictly interpreted, would seem to infer that the excavators were aware of the thickness of the rock above them, that is, of the depth of the channel below the surface of the hill This they could only ascertain either by measurement at the mouths of the channel, or by running contours over the hill—just as the accompanying section is constructed from the contours—unless they made a shaft to the surface This is just what they did, for at a distance of 470 feet from the south end a shaft still exists reaching up to the rock surface It is covered in above with large fallen blocks, but was no doubt once open and served as a well mouth The rock surface is 14 feet above the floor of the tunnel, the height of which is 3 feet 8 inches at this point The thickness of rock is, therefore, about 10 feet "above the head of the excavation" at the shaft This is the minimum thickness, as is shown by the section, for towards the north the rock surface is 170 feet above the roof of the tunnel Perhaps in the end the doubtful word may prove to be מאת "a hundred," of which the first and last letters certainly occur, though the א has not been discerned, and the inscription in such a case would refer, in general terms, to the average thickness of the rock above the aqueduct.

'Still more interesting is the question whether the length of "a thousand cubits" can have any connection with the measured length of the canal It is remarkable that 1,700 feet is very close upon 1,000 cubits of 21 inches, and is also very nearly 1,200 cubits of 17 inches, so that the two readings adopted by Professor Sayce and Mr Shapira respectively might both be supported on the assumption of a different length for the cubit It would, however, be a very astonishing coincidence if a tunnel so irregularly excavated should in the end have proved to be exactly a thousand cubits long, and it seems far more probable that the writer of the inscription gives an estimated or approximate length, in round numbers, in which case the inscription has no value as fixing the length of the cubit I have given, in the "Quarterly Statement" of 1880, a *résumé* of the measurements of the Jerusalem Haram and the Galilean Synagogues, which appear to indicate a length of about 16 inches as that of the Jewish cubit, which was not of necessity the same as the Egyptian cubit

'The average measurement of the human hand, as compared with the length of the Zereth or breadth of four fingers, and of the *sit* or span and the digit of Maimonides as compared with the contents of an average egg, all agree with this shorter measurement The "cubit" (or fore arm) "of a man" cannot be measured so as to give 21 inches, nor could 48 barleycorns be made to measure more than about 16 inches (cf "Handbook to Bible," pp 57, 79)

'We have paid special attention to the question whether any marks of measurement could be found on the walls or roof of the channel, and we obtained measurements of certain distances between marks on the wall, of which a digest is given below The marks in question are evidently artificial, being square or triangular notches measuring about 1½ inches wide In one place two of them occur 8 inches apart (half a cubit of 16 inches), which, if it had any weight, would seem to indicate that the measurements were not very carefully taken. It seems impossible, however, to deduce any result of value from the measurements tabulated.

'There are marks in other places where iron cramps seem to have been driven some 3 inches into the rock, but these also have no regular interval of occurrence, and a very careful examination of both walls, four times repeated, has failed to show us any other marks or signs than those above mentioned

'The general impression resulting from an examination of the conduit is that it was the work of a people whose knowledge of engineering was rudimentary It is well known that in mining it is very difficult to induce the excavator to keep in a truly straight line, the tendency being to diverge very rapidly to one side It is possible that this is the real reason of the crooked run of the canal, but another reason may have been the comparative hardness of the strata met in mining at a uniform level through a hill, with beds having a considerable dip It will, however, be observed that, after passing the shaft, the direction of the tunnel changes to a line more truly directed on the Virgin's Fountain The excavators from the Siloam end became aware, probably by the impossibility of seeing a light at the head of the mine, when standing at the mouth of the channel, that they were not going straight, and the only means they had of correcting the error, consisted in making a shaft up to the surface to see where they had got to After ascertaining this, they went straight for about 140 feet, and then diverged gradually to the left, but their general direction, nevertheless, agrees roughly with that of the rock contour, which may be due to following a particular seam of rock

'The northern party were yet more hopelessly in the dark, and the great divergence to the west can only be explained by supposing that they did not know where they were going. They seem to have been guided, at length, by the sound of the picks in the other tunnel, which would be heard at a considerable distance through the soft rock, but even then their course indicates great uncertainty

'It is also apparent that a rivalry must have existed between the two parties, working as the inscription tells us "eagerly," for the two narrowest parts of the tunnel occur, one on either side of the point of junction In fact, the excavators must be accused of scamping their work, with the object of showing a greater total length than their rivals, and for this purpose they reduced the size of the excavation to a minimum in which it seems almost impossible that a man could have worked It is clear, anyhow, that the excavators were not giants, and probable that they were under the average size of the modern peasantry in Palestine.

'Another interesting question is the increase of height in the tunnel near the point of junction This may have been due to the intention of concealing their previous proceedings, but it seems more probable that the reason is to be found in the difference of level between the two channels where they meet. The height of the channel does not appear—according to the section—to bear any relation to the thickness of the rock above, but there must evidently have been some cause for the difference of height in various parts of the aqueduct There is a fall of a foot in the whole length of the tunnel, but the bottom is coated with very hard mud, so that it is quite impossible to ascertain whether the floor is properly levelled or no At one point (*h* on enlarged plan) a sudden fall of 4 inches appears to occur in the floor level, and the water becomes deeper within a few steps From this point, also, the roof begins to rise, and gets gradually higher In 49 feet from *h* to the point of junction *e*, the tunnel increases from 2 feet 6 inches to 4 feet 8 inches in height It seems probable, therefore, that the southern, or up-stream tunnel, struck higher by about 2 feet than the floor of the down-stream shaft, and that the floor was subsequently lowered as far as *h*, when it was found that the water would flow for the rest of the way to the pool without further alteration This inference could only be drawn from the fact of the *southern* channel being the highest—which is the case. If the northern channel had been the highest we should probably have found a kind of shoot, instead of a gradual levelling off of the floor The observation serves, however, to give an independent confirmation of the determination of the point of junction before indicated from consideration of the plan alone

'With all allowances, it is nevertheless remarkable that there should have been so little difference of level between the two tunnels It would have been easy, from the flow of the torrent in the Kedron, to make sure that the Pool of Siloam was lower than the spring, and it would not have been difficult by means of a plummet, or of a rude water-level of some kind, to preserve the level of the channel floor, but it is extraordinary that the two extreme ends of the channel should differ by only a foot in level, considering that the two ends were started independently

'The two ends of the channel are more lofty than any other part, and near the mouth the tunnel is 12 to 16 feet high Perhaps this may also be connected with the question of the water level, for the intermittent flow of the Virgin's Pool must have caused considerable difficulties. It is true that at the time of the excavation of the tunnel, the overflow of the spring appears to have been carried off by the "brook that ran through the midst of the land" (2 Chron xxxii 4), but some of the water would, nevertheless, run down the channel If, however, the floor of the tunnel at its upper end had been kept about a foot above the high-water mark until the end of the work, this would have been sufficient to prevent any flow down the tunnel The height of the aqueduct at the upper end is 2½ feet, and it increases rapidly to 6 feet in 20 feet distance, after which it decreases gradually to about 3 feet This might be explained by supposing that the tunnel was purposely at first run up hill for a short distance to prevent the water entering, and was afterwards enlarged by sinking the floor so as to admit the overflow when the natural outflow of the Virgin's Pool down the Kedron valley was stopped

'The enlargement at the southern end may also be due to the sinking of the floor after the junction had been effected It may have been found that the water stood in the tunnel and could not flow into the pool The excavators would then cut away the rock floor until the water ran through, and the roof would consequently be higher above the water than near the centre, where the water was standing In this case, it seems to have been merely acci-

dental that the levels of the tunnels near the point of junction were so nearly the same, and the differences of height in various parts are seen to be easily explained, on the theory that the aqueduct required considerable alteration after the junction had been effected, and the water admitted into the upper part of the channel in order to obtain an outflow at the Pool of Siloam

'I have thus enumerated all the points which seem to me of importance as bearing on the method of construction of the canal, and its relation to the wording of the inscription The number of small bends and irregularities in the course of the tunnel shows, not less than do the larger irregularities, that it was the work of primitive engineers, unacquainted with any very accurate instruments or methods of measurement Such rock cut channels are found in other parts of Palestine (as at 'Askar, near Shechem, Sheet XI , at 'Amm, Sheet VIII , or at Lejjûn, Sheet VIII), but the Siloam tunnel is the most important work of the kind yet discovered The sides are covered up to a height of about 3 feet with a thin red cement, very hard, and full of pounded pottery, being exactly similar in constitution to that now used in Palestine for lining cisterns The cracks in the rock are in many places filled in with similar cement above the 3 feet level In other places the rock has been cut away so as to form a little drain, by which a small land spring could be led into the channel

'The lower part of the channel has been widened slightly in the parts where the tunnel is highest, the walls being scooped out some 3 inches on either side to a height of about 2½ feet. There is also a shaft or standing place at 700 feet from the south end It is 7 feet high from the floor, and the roof is of rock Possibly it was made by the excavator to rest himself in by standing upright after working for a long time in a recumbent position, for it is near the lowest part of the tunnel It may also have been constructed for safety when the sudden overflow of the spring filled the tunnel, for his head would be high above the water if he sat or stood under this shaft

'We did not observe any side entrance into the channel at any point, and the walls and roof are of solid rock throughout The initials J A S H M, and date 1835, are burnt with the smoke of a candle on the roof of the tunnel at 240 feet from the southern end

'In connection with this tunnel I may add a few words as to the new aqueduct recently discovered by the Fellahin It was not apparently examined by Dr Guthe, and only a small part of it is at present visible The level of the top of the covering stones is about 2,091 feet at the point observed The stones are 1 foot thick, and the channel beneath is at least 2 feet deep, and probably more, as it is filled up with rubbish This gives a level 2,088 feet, which is 4 feet above the level of the bottom of the Pool of Siloam, from which this aqueduct appears to have led The channel is rock cut, 3½ feet wide, and roofed with slabs of stone In some of these there are slits about 3 inches wide and 20 inches long, but the object of these openings is not clear, unless they served for air holes to relieve the pressure The aqueduct appears to follow the contour of the hill, westwards from Siloam, and the Fellahin, who have not discovered the end of it, suggested that it went to the Bir Eyûb, where it will be remembered Colonel Warren found an unfinished subterranean channel The difference of level is, however, too great to allow of the two being probably connected It would be very interesting to follow up the aqueduct from both ends, especially as it may furnish the real explanation of the expression that Hezekiah "stopped the watercourse of the upper spring and brought it straight down to the west side of the City of David" (2 Chron xxxii 30), thus throwing some light on the vexed question of the position of this part of Jerusalem

It is quite possible that subterranean reservoirs, as yet unknown, may exist in connection with this aqueduct, for the Bîr Eyûb itself was long quite unknown, and was recovered in the Middle Ages by excavation

TABLE OF DISTANCES, SILOAM TUNNEL.

The Zero marks the commencement of a series of measurements between two or more notches

	Feet	16 inch cubit.	17 72-inch cubit	18 inch cubit	21 inch cubit
Notch A	0	0	0	0	0
„ B	$\frac{8}{12}$	5	45	44	38
„ C	$57\frac{10}{12}$	43 12	38 43	38 33	32 86
„ D	0	0	0	0	0
„ E	$41\frac{10}{12}$	31 37	28 33	27 87	23 90
„ F	0	0	0	0	0
„ G	$12\frac{8}{12}$	9 5	8 57	8 44	7 24
„ H	0	0	0	0	0
„ I	$15\frac{9}{12}$	11 37	10 27	10 11	8 69
„ J	0	0	0	0	0
„ K	$25\frac{6}{12}$	19 12	17 27	17	14 57
„ L	$24\frac{7}{12}$	18 37	16 59	15 93	13 52
„ M	$9\frac{11}{12}$	7 12	6 43	6 33	5 43

'AIN UMM ED DERAJ,

the so called Virgin's Fountain, contains the supply which runs by the aqueduct to Siloam as mentioned in the preceding pages The spring rises in a cave measuring about 20 feet to the back, and 7 feet across There is an entrance at the back towards the left, into a small tunnel, which runs for 67 feet in a serpentine form, and out of which the main Siloam tunnel starts on the west side at a distance of 50 feet along the serpentine tunnel The approach to the cave on the east is down two flights of steps, the upper of sixteen steps, the lower of ten—the second flight being under a modern arch, which also covers a landing 13 feet long by 10 feet wide, between the flights The total length of the landing and two flights is about 53 feet, and there is a passage, 10½ feet long, 3 feet wide, at the bottom of the lowest flight,

which is only 5 feet wide The pool seems originally to have been visible in the face of a cliff, and the vault and steps are modern Possibly the original exit of the water was down the Kedron valley, until this was stopped by Hezekiah (2 Chron xxxii 4), when he stopped 'the stream of the upper spring' (Gihon, cf v 30), and cut the aqueduct to Siloam

The water wells up in the cave, and attains a depth of about 4 feet 7 inches before running away through the passage at the back. The level of the bottom of the pool appears to be about 2,084 feet above the Mediterranean, and the aqueduct channel 2,088 feet where it leaves the pool, giving a fall of about a foot to Siloam

The intermittent flow is held by the natives to be due to a dragon who swallows the water beneath the cave when awake, when he is asleep the water rises and flows away It is interesting to note that a similar dragon, who 'keeps back the waters,' is the enemy of the Indian rain-god, Indra, whose contest with this dragon and delivery of the waters is constantly noticed in the Vedas

The modern Jews believe the waters of this pool to be a sure cure for rheumatic complaints They often go in numbers, men and women together, and stand in their clothes in the pool, waiting for the water to rise This fact, together with the meaning of the name Bethesda, 'house of the stream,' renders it very probable that the Virgin's Fountain is the pool mentioned in the fourth Gospel (John v. 2), which was near the 'sheep place'—possibly, therefore, outside Jerusalem

The intermittent flow occurs, in spring, twice or thrice in a day, but in autumn only once in two or three days

The following is Sir Charles Warren's account of his exploration of the shaft at the end of the serpentine passage at the back of the pool

'To day, October 24th, having managed to obtain a small quantity of wood after infinite trouble, we went down to the Fountain shortly after sunrise, we had some 12 feet battens 2 feet square, but were obliged to cut them in half, as 6 feet lengths could only be got into the passage, the water was unusually low, and we managed to crawl through on our bare knees without wetting our upper clothing very much, which was fortunate, as we had the whole day before us After passing through the pool we had to crawl 50 feet, and then came upon the new passage, which is 17 feet long, opening into the shaft The bottom of this shaft is (now that the deposit is removed) lower by about 3 feet than the bottom of the aqueduct, and was evidently filled from the Virgin's Fountain The length of the shaft averages 6 feet, and width 4 feet. We had a carpenter with us, but he was very slow, and quite unused to rough-and ready style of work, and the labour of getting up the scaffolding devolved on Sergeant

Birtles and myself, the Fellahin bringing in the wood and handing it to us Once, while they were bringing in some frames, the spring suddenly rose, and they were awkwardly placed for a few minutes, being nearly suffocated

'By jamming the boards against the sides of the shaft we succeeded in getting up 20 feet when we commenced the first landing, cutting a check in the rock for the frames to rest on, and made a good firm job of it Then, with four uprights resting on this, we commenced a second landing On lighting a piece of magnesium wire at this point, we could see, 20 feet, above us, a piece of loose masonry impending directly over our heads, and as several loose pieces had been found at the bottom, it occurred to both of us that our position was critical Without speaking of it, we eyed each other ominously, and wished we were a little higher up The second landing found us 27 feet above the bottom of the shaft The formation of the third was very difficult, and, on getting nearly to the loose piece of masonry, we found it more dangerously placed than we had imagined, and weighing about 8 cwt So we arranged it that the third landing should be a few inches under this loose mass, so as to break its fall and give us a chance. This third landing was 38 feet above the bottom of the shaft We floored it with triple boards It was ticklish work, as an incautious blow would have detached the mass, and I doubt if our work would have stood the strain About 6 feet above landing No 3 the shaft opened out to west into a great cavern, there being a sloping ascent up at an angle of 45°, covered with loose stones about a foot cube Having hastily made a little ladder, I went up, and very cautious I had to be The stones seemed all longing to be off, and one starting would have sent the mass rolling, and me with it, on top of the sergeant, all to form a mash at the bottom of the shaft After ascending about 30 feet, I got on to a landing, and the sergeant followed We found the cave at this point to be about 20 feet wide, and to go south west and north-west The former appeared inaccessible, the latter we followed, and at 15 feet higher came on a level plateau From this is a passage 8 feet wide and 3 feet to 4 feet high, roof cut in form of a depressed arch, out of rock We followed it for 40 feet, and came to a rough masonry wall across the passage, with hole just large enough to creep through On the other side the passage rose at an angle of 45°, the roof being at the same angle and still cut in the same manner as before The space between the roof and the bank is about 2 feet There are toe-holes cut in the hard soil, so that, by pressing the back against the roof, it is easy to ascend Fifty feet up this found us at the top, where was another rough masonry wall to block up the passage, and on getting through we found ourselves in a vaulted chamber 9 feet wide, running about south for 20 feet, arch of well-cut squared stone, semicircular, crown about 20 feet above us, below us was a deep pit We had now to go back for ropes, but, on getting near the shaft, found it impossible to get down with safety Luckily the sergeant had a sash on, which, torn up in four pieces, just reached down to the ladder, and we hauled up the rope and took it to the vaulted chamber and descended into the pit, about 20 feet deep, and then into a smaller one about 8 feet deeper, where we found the appearance of a passage blocked up Coming back, we explored another little passage with no results

'The sides of the horizontal portion of the passage are lined with piles of loose stones, apparently ready to be thrown down the shaft, on these we found three glass lamps of curious construction at intervals, as if to light up the passage to the wall or shaft, also in the vaulted chamber we found a little pile of charcoal, as if for cooking, one of these lamps, a cooking dish glazed inside, for heating food, and a jar for water Evidently this had been used as a refuge Two other jars (perfect), of red pottery, we found in the passage, and also over-

hanging the shaft an iron ring, by which a rope might have been attached for hauling up water. Having now explored this passage, there only remained that going south-west. To get to it, it was necessary to go down half way to the shaft and then up again for about 15 feet. I had a rope slung round me and started off, the use of the rope was questionable, as it nearly pulled me back in climbing up. On getting into the passage we found the roof (of rock) had given way, and nothing definite could be seen but pieces of dry walls built up here and there. In coming down, part of a dry wall topp'ed over into my lap as I was sitting on the edge of the drop. Sergeant Birtles was 6 feet lower down, and narrowly escaped them, they were each about a foot cube, three of them came on me, but I managed to hitch them back into the passage. We now heard, to our surprise, that the sun had set, so getting together our delf, we made all haste down. On coming out, great was the commotion among the people of Siloam, who wanted to have a share in the treasure, and would not believe we had only got *empty jars*. We got into town some time after dark.

'*October 28th*.—On going up the scaffold next day, a stone over 2 feet long was found lying on the top landing, it had fallen during the night. The men are now working at the blocked up passage in the vaulted chamber. Two more jars have been found.

'The hill, which is generally called Ophel, extends in a southerly direction from Mount Moriah, gradually sloping down through a horizontal distance of 2,000 feet until it becomes lost at the Pool of Siloam. Its highest point, near the Triple Gate, is 300 feet above its foot at the Siloam Pool, it is bounded on the east by the Kedron, and on the west and south by the Tyropœon valley, these two valleys meeting at the pool. The descent into the valley of the Kedron is very steep (about 30°), and the natural surface of the rock is covered up by *débris* from 10 to 50 feet in height.

'About the centre of the Ophel hill, to the east, in the Kedron, is the Fountain of the Virgin, an intermittent spring whose waters communicate with the Siloam Pool by means of a rock-cut canal running in a serpentine course through the hill. About three-quarters of the way up the hill, due west from the Virgin's Fount, is a vault running north and south, the crown of which is 22 feet below the present surface of the slope. This vault spans a chasm or cutting in the rock, and the springing is from the rock, the chasm, when discovered, was over 40 feet deep, and beyond that depth was filled up with *débris*, it, and the vault also, is 8 feet wide, the arch was originally semicircular, but is now very much distorted. The length of the arch is about 11 feet, but 4 feet farther to the south the vault is open, the roof being self supporting, earth and stones, and is in a very dangerous condition. It appears that the southern wall, on which the voussoirs overlapped, has given way and fallen into the chasm, taking with it a quantity of rubbish from several feet above the crown of the arch at the south end; the voussoirs here project irregularly, and a slight fall of rubbish from above them would probably displace one of them, and thus cause a further fall, and so the arch would collapse. Some time in June, or July, or August, a fall of stones took place, when the work was not going on.

'It is not apparent at present in what manner the vault was reached from the outside, but it is likely that there was an entrance through the southern wall which has been described as having fallen.

'About 17 feet 9 inches below the crown of the arch at the north side is the commencement of a sloping rock-cut passage leading north east by east. The earth has been cleared out, and we find the passage to be 8 feet wide and from 10 to 12 feet high. There are several rock-cut steps for the first part of the descent, then a landing and a drop of 10 feet

SECRET PASSAGE ABOVE VIRGIN'S FOUNT

The horizontal length of this passage is 39 feet, the fall is 37 feet At the bottom is a passage whose roof slopes about 5 feet in its length of 68 feet This passage is on plan nearly semicircular, bending round from north east by east to south-south west Then there is a sloping passage for about 18 feet, the fall being at an angle of 45°, and we arrive at the top of the shaft, 44 feet deep All these passages, canals, shafts, etc, are cut in the solid rock, the nature of which is a hard siliceous chalk called *mezzeh*, except near the top of the shaft, where the rock is soft and decayed.

'As yet the rubbish has only been cleared out of the staircase passage, so that we know nothing about the bottom of the passage leading to the shaft, but probably it is 10 feet high

'It was very desirable to know how far the chasm under the vault extends, and for what purpose it was cut out, and also what there is to the south of the vault The vault, however, was in too dangerous a condition to work under, so I arranged to fill up the chasm with the *débris* from the staircase passage This we have already partially done On the soil reaching the top of the staircase landing, gallery frames were fixed up through the length of the vault, and battened together, and soil filled in at the side and top, so that the men can now work to south or sink a shaft without danger from the arch giving way I hope the arch will be filled up to the top and quite secure in a week

'We have now commenced the prolongation of the before mentioned gallery to the south, if we find nothing in particular, I shall make steps up to the surface, so that any visitors this year to Jerusalem may go and see these passages without descending a vertical shaft

'I should have mentioned that the voussoirs of the arch are of *melekeh*, very much decayed, and capable of crumbling on the slightest extra pressure

'It is a curious circumstance that the landing at the top of the staircase is unconnected with any doorway or other means of exit, so that it suggests itself whether there has been a wooden bridge across the vault from the southern to the northern side, as it appears as if this chasm is of great depth, and any very temporary means of getting across would have been disagreeable with such a drop down below

'Should we find that our rock-cut canal below Bir Eyûb is unconnected with that well, we may hope that it extends from and forms part of this system of passages at the Virgin's Fount. It will be observed on the plan (No 19) that the vault comes quite to the south-east of the canal from Virgin's Fount to Siloam, and may, therefore, very well be connected with other passages

'The work of excavation here has been going on at intervals In May, under Dr Chaplin's superintendence, the rock was bared for 30 feet on the surface down towards the Kedron, and the rubbish in the passages was moved from side to side in search of other branches The gallery along the surface of the rock had eventually to be abandoned on account of the treacherous nature of the soil The work was resumed about a fortnight ago

'A shaft was sunk at 40 feet to south of vault, and at the same time the space under the vault was filled up by the earth from the rock cut passages On getting up to the level of the entrance down by the staircase, a gallery was laid on the top of the soil and then covered over with earth until it was filled in right under the arch This was very dangerous work, as the arch appears ready to fall at each concussion of the falling earth The gallery was then driven to south, when it was found we were in a rock-cut passage without a roof, the original entrance to the vault, after ascending rough steps we cut in upon the shaft we had sunk

south of the vault, joined them, and then filled up the shaft, which was over the vault Having now the arch made secure, we commenced a shaft directly underneath it to examine the rock-cut shaft, but the made earth was allowed to fall in, and a slip took place throughout the whole of the gallery, so much so that the work had eventually to be abandoned'

Bîr Eyûb,

'Job's Well,' is so called from a native tradition that Job sat here on his dung-hill * The well was rediscovered by the Franks in 1184 A D, and cleaned out; it was then identified with En Rogel The following is Sir Charles Wilson's description of the well.

'The only well known at present is Bîr Eyûb, a little below the junction of the Kedron and Hinnom valleys, but others may possibly exist in the city and neighbourhood, which have been accidentally closed by rubbish, or purposely stopped during some siege, and never reopened This well, which has a depth of 125 feet, is still, in summer, one of the principal sources of supply The water is collected in a large rock-hewn chamber, and is derived from the drainage of the two valleys and their offshoots The supply is directly dependent on the rainfall, and in winter, after from three to five consecutive days' rain, the water rises above the shaft, and flows down the valley in a stream The well has been deepened at some period, as at a depth of 113 feet there is a large chamber, from the bottom of which a shaft, 12 feet deep, leads to the present collector There is a great quantity of rubbish in the valley, and in constructing the well the idea seems to have been to stop out the surface-drainage, which might be charged with impurities from the city, and depend entirely on the water running in between the lower layers of limestone The well might be greatly improved by enlarging and freshly cementing the collecting-chamber, as at present a large quantity of water is lost, and some arrangement of a public nature might be made for raising the water and conveying it to the city. This is now in the hands of the Fellahîn of Silwan (Siloam), who charge from one penny to sixpence per goat-skin for water delivered in the city, and are much addicted to cheating by partly filling the skins with air The water of Bîr Eyûb has that peculiar taste which arises from the surface-drainage of the city being imperfectly stopped out'

The rising of the waters near the Bîr Eyûb, from a hole among the heaps of *débris*, is held as a feast by the inhabitants of Jerusalem, who may be seen walking beside the water, or sitting in the valley in numbers on a bright winter day when the water is flowing. Men, women, and children here picnic all day

* The legend to which this well owes its name is probably that found in the Koran (Sura xxxviii, verses 40, 41), which relates that Job was commanded by God to stamp with his foot, whereupon a fountain sprang up miraculously for his refreshment The same legend accounts for the Tannûr Eyûb, near 'Ain Tâbghah, on the Sea of Galilee (Sheet VI of the Survey)

Near this well an extraordinary unfinished aqueduct was explored by Sir Charles Warren. The following is his account

'*Rock cut Aqueduct*.—Down the valley of the Kedron, and south of Siloam, there is the Well of Job, or Joab, about which there are several curious traditions which connect it in many ways with the ancient Temple It has been examined, but to my mind there is yet a mystery concealed there It is a well 100 feet deep, without appearance of connection with any surface drains, and yet after heavy rains it fills up and overflows in a voluminous stream

'South of this well, about 500 yards, there is a place called by the Arabs, "The Well of the Steps," about which they had a tradition that there were steps leading up to the Well of Joab I had the ground opened, and at 12 feet below the surface came upon a large stone which suddenly rolled away, revealing a staircase cut in the solid rock leading to a rock-cut chamber and aqueduct, running north and south It was filled up with silt or fine clay We cleared it out to the north for about 100 feet, and found it to be a great aqueduct 6 feet high, and from 3 feet 6 inches to 4 feet broad When the winter rains came on, a stream burst through the silt, and, completely filling the passage, found its way up the steps and rolled down the valley in an abundant stream, joining that from the Well of Joab In April the stream abated, and in May we were able to commence again, and, working day and night, we may expect to reach the city in six months We are working with English barrows in this aqueduct, much to the delight of the Arab workmen, who take a childish pleasure in using these new toys We clean out at present about 15 cubic yards in twenty-four hours Looking at this aqueduct from a sanitary point of view, we might suppose it built for carrying off the sewage of the city, and, from a military point of view, for carrying secretly off any superabundant water to the nearest crevice in the rocks, possibly it may have been used for both purposes Looking into the Bible history, we find in the Second Book of Chronicles that Hezekiah stopped the brook that ran through the midst of the land, saying, "Why should the King of Assyria come and find much water?" Again, we find from another account that the refuse from the burnt offerings was carried down to the Kedron by a subterranean channel, and, as water would be wanted to run it down, it may be supposed that the aqueduct in question might have been used for some such purpose At any rate, it is highly important that we should discover for what purpose, and we have the chance of its being a clue to the Altar of the Temple, and—which is of more practical value to the inhabitants of Jerusalem—to the hidden springs of Hezekiah, which, if found, might again supply the city with living water

'*Rock-cut passage at 'Ain el Lozeh*.—The passage was followed up until 170 feet from Bir Eyûb, where another staircase was found, the steps of which are in very good preservation the passage was then continued to north for upwards of 100 feet, until 12th December, 1868, when a heavy downpour of rain stopped the work, Bir Eyûb overflowed, and the rock-cut passage was filled up with a stream of water, which found vent by the two lower staircases

'The rainfall in December of 1868 was much greater than usual, up to 15th of the month 8·703 inches had fallen, and it is interesting to find that the overflowing of Bir Eyûb is due, not so much to a steady long continuous rain, as to a sudden heavy fall

'It is now nearly certain that the rock cut passage does not communicate with Bir Eyûb, as we are only 70 feet to south of it, and at least 70 feet to west Since that time the work has not been resumed until within the last few days, when I recommenced in order to

obtain a correct idea of the probable expenditure that would be incurred in continuing the work

'It took a few days to get quit of the mud which lay in the passage, for all through the summer there has been a little water trickling into the tunnel on going on to north we had not cleared away 3 feet before a large grotto was discovered, out of which the aqueduct opened.

'Apparently this grotto was originally natural, but afterwards cut out so as to form a receiving tank It is 35 feet from east to west, and 20 feet from north to south, nearly oval on plan; it is about 45 feet in height, the roof being formed by the sides gradually approaching each other At the highest point there appears to be a shaft upwards, about 2 feet square, covered by a white stone. The bottom of the passage by which we entered is about 9 (or more) feet above the bottom of the cistern, so that there would always be a depth of 9 feet of water retained in it At the northern end are two aqueducts running into the cistern the upper and eastern one has its bottom 12 feet above the bottom of the outlet aqueduct, below it (the upper) by 9 feet, and 6 feet to the west, is the lower aqueduct, which, after a few feet, runs in under the upper one, they both come from the same point (about 80 feet north-north-east of the cistern), where they are in one, forming a passage 15 feet high, and nearly 6 feet wide This point is 90 feet due west of Bir Eyûb

'The way in which these two aqueducts run together is very curious at the point where it is one passage, there is a little staircase cut in the rock going up about 9 feet on to a landing, where the upper aqueduct begins, this is 3 feet 10 inches wide, and 5 feet 9 inches high, it is very well cut, the roof is curved a little, and it runs nearly straight to the cistern, falling about 2 (?) feet in length, about midway it is blocked up by a masonry wall 3 feet thick, and composed of cut stones set in a hard black mortar, apparently mixed with oil The lower aqueduct starts from the same level as the bottom of the high passage It is only about 3½ feet high (apparently), and the top is about 6 feet below the bottom of upper aqueduct, for some distance it runs immediately under the upper one, and then, with some winding, comes out to its west by 6 feet just before it enters the cistern, it opens into a natural cleft in the rock, which appears to be part of the original cavern This cleft is nearly perpendicular, and is about 4 feet wide, and over 15 feet high Corporal MacKenzie went up it 48 feet to north-west, it then gets too narrow to be followed up.

'The rock throughout is a hard mezzeh, and the passages appear to have been cut out with the chisel. The surface of the rock appears to be not less than 70 feet above the aqueduct

'This tunnel, as we have now examined it, extends from near Bir Eyûb to a point 1,800 feet down the Kedron valley it has been judiciously cut under one side (the west side) of the valley, so that, though it is from 70 to 90 feet under the surface of the rock, yet the staircases being commenced to the east (nearer the bottom of the valley), have not to descend by more than 40 to 50 feet In the 1,800 feet we have cleared out, seven staircases have been exposed. they are about 3 feet wide, and descend at about an angle of 35° The steps are about 1 foot in height, and the tread is about 15 inches in some cases the steps are much worn and broken At the bottom of some of the staircases the aqueduct is deepened a little, so as to form a shallow pool

'In one place, between the third and fourth staircase, there is a branch tunnel leading across towards the east side of the valley in a south-east direction this was only followed for 30 feet

'It is apparent that this aqueduct was of considerable importance, for the labour in cutting it so far below the surface must have been enormous That it was for water I think there can be no doubt, and probably for pure water

'The cistern we have just found is similar in its construction to those found under Robinson's Arch, and the aqueduct altogether has the same appearance as the rock cut aqueduct found there The staircases, too, may have originally been used for bringing up the chippings, but they appeared to be very much worn, as if they had been in constant use

'We have not as yet found there is any connection with Bir Eyûb, and if we do find any it will probably be a communication by which the water from the aqueduct flows into it, and cut at a later period, neither is there any appearance of its being connected with the Virgin's Fount Aqueduct, for they differ in height and width, the tunnel we have found being nearly twice as wide and very much higher, also the Virgin's Fount Aqueduct winds very much more than this one, and there are shafts instead of staircases

'It would be a most important point to establish the direction from whence this great aqueduct comes, at present we do not know whether it comes down the Kedron Valley, the Tyropœon, or by the valley from the Jaffa Gate

'It is currently reported in the city that a Jewish blacksmith descended Bir Eyûb a few years ago, when it was dry, and found a passage at bottom from whence a strong wind was blowing However this may be, it is evident that the man has some curious tradition about the place, as he has been trying to buy the land over where we have lately found the grotto, and the Fellahin of Siloam say they refused twelve napoleons for it This man sent a messenger a short time ago to ask if we were going on with the clearing out of the great aqueduct, and to say that if so he intended to raise the money to continue our work He probably had been reading the accounts of Jelal and Mejr ed Din

'*December 21st*, 1869.—In continuing our work a staircase at an angle of about 45°, and 90 feet on slope, has been found The top is walled up with masonry near the top another staircase leads off towards Bir Eyûb, branching into two The rains have suddenly set in, and if Bir Eyûb overflows, this work will have to be stopped for the present

'N B.—It has been stated that the bottom of the cistern or grotto is 9 feet below bottom of outflow aqueduct, but 9 feet is the depth to which we have sunk The water in the cistern prevents our sinking deeper, and the jumper cannot be driven on account of the large stones met with

'*The great Rock-Cut Aqueduct south of Bir Eyûb*.—Account of this was given up to December 21st, 1869, when some rock-cut staircases were found 86 feet north of the cistern or grotto

'A shaft was now sunk at 75 feet north of the pool at Bir Eyûb, and at a depth of 22 feet came on head of staircase The soil sunk through was black earth and stones, mixed with a great quantity of red potsherds The staircase was found to be closed at top by a masonry wall, and on breaking through this, the steps, after going 6 feet to west, branch off north and south That to the north has again a branch staircase to east

'The northern staircase has sixty-seven steps It descends 39 feet vertical, in 56 feet horizontal, and ends abruptly, having never been finished At 16 feet 6 inches down this staircase the branch to east commences, and falls (with twenty-two steps) 19 feet vertical in 27 feet horizontal, it then turns to north, and falls 5 feet 10 inches in 10 feet 6 inches, and ends abruptly

'The staircase to south (with fifty-four steps) falls 41 feet 5 inches in 72 feet, and ends in the aqueduct, where the upper and lower join together, at about 86 feet north of the grotto These staircases were only partially filled up with mud and broken jars and pottery.

'There only now remained the continuation of lower aqueduct to north to examine. This was continued for 148 feet, where it was also found to end abruptly, rock on all sides It is generally about 3 feet 7 inches wide and 6 feet high It appears, then, that this great work has never been completed It is to be presumed that the great volume of water which now issues from the aqueduct in the spring, enters through the rifts in the rocky sides of the grotto The reasons for the wall stopping up the upper aqueduct having been built are not apparent This aqueduct, leading into the grotto, is 86 feet long, that is, 44 feet from grotto to first wall, 4 feet thickness of wall, 32 feet to second wall, 3 feet thickness of wall, and 3 feet to small steps.

'In the first wall at bottom a hole or duct was left $6\frac{3}{8}$ inches by 4 inches, and on the northern side a stone plug to fit and 12 inches long was found in it'

The identification of this site (Bîr Eyûb) with En Rogel is unsatisfactory, for the latter was a spring, not a well, and it was close to the Rock Zoheleth (1 Kings i 9), which is the present rock Zahwerleh Thus it is more probable that En Rogel is the spring of the Virgin's Fountain described above (Cf. Joshua xv. 7)

Birket Mamilla

This fine pool feeds the Hammâm el Batrak, or so-called Pool of Hezekiah, and also the north-west tower of the citadel, by an aqueduct It is perhaps the Beth Memel of the Talmud (Tal Bab Erubin 51 *b*, Sanhed 24 *a*, Bereshith Rabba, ch li) Mejr ed Din says the Christians called it Babila, and the Jews Beit Mello It is called Lac du Patriarche in the 'Citez de Jherusalem,' and Fons Gihon Superior by Marino Sanuto It measures 316 feet east and west, the east wall being 218 feet long, the west wall 200 feet. The buttresses at the sides are of modern masonry The average depth is 19 feet, there is much rubbish at the bottom, and the pool leaks. A large cemetery surrounds it, and as it collects only surface drainage the water is impure Thirty-eight feet from the lower end of the pool is a chamber, in which the conduit narrows from 21 inches square to 9 inches square, and can be closed by a stone to regulate the flow.

Birket es Sultân

An enormous reservoir, formed by damming the valley (Wâdy Rabâbeh) It was constructed about 1170 A.D. by the German knights (cf 'Citez de Jherusalem'), and repaired later by Sultân Suleimân Ibn Selim in 1520-66 A.D. A fine Arab fountain on the dam bears an inscription of this reign Rabbi Uri of Biel (1537-64) gives it the present name, and it is mentioned in the Cartulary of the Holy Sepulchre (No 169) as Lacus Germani. The pool measures 592 feet in length, and is about 220 feet wide and 40 feet deep

The present low level aqueduct from the pools at Urtâs crosses Wâdy Rabâbeh above the Birket es Sultân (cf. Sheet XVII., Section B), and following the southern slopes of the modern Sion, enters the Haram by the viaduct of the Bâb es Silsileh, carrying water to the fountain called El Kâs ('The Cup'), north of the Aksa Mosque This aqueduct is often out of repair, but still carries water at times It is supposed to be that mentioned by Josephus as constructed by Pontius Pilate (18 Ant. iii. 2) An important discovery was, however, made by Sir C Warren with regard to the old line of this conduit. The following is his account

'*Aqueduct near the Cœnaculum September*, 1867.—On the open ground on the western hill which lies south of the city wall, we made an important discovery, viz, an ancient aqueduct, at the south-east corner of the Cœnaculum, and about 50 feet north of the present aqueduct —I have no doubt it must be the original aqueduct from Solomon's Pools to the Sanctuary. We dug out the earth from a cut stone shaft 2 feet square, and at a depth of 16 feet was a channel running from the west to the north-east, precisely similar in construction to the passages under the Triple Gate It varies very much in size, sometimes we could crawl on hands and knees, then we had to creep sideways, again, we lay on our backs and wriggled along, but still it was always large enough for a man of ordinary dimensions In parts built of masonry, in parts cut out of solid rock, it is generally of a semi-cylindrical shape, but in many parts it has the peculiar shoulders which I have only seen under the Triple Gateway, but which have been noticed by Mr Eaton, in the channel leading towards Tekoah To the north-east we traced the channel for 250 feet, until we were stopped by a shaft which was filled with earth, to the west we traced it for 200 feet, till it was stopped in the same manner. In part of this passage we could stand upright, it being 10 or 12 feet high, with the remains of two sets of stones for covering, as shown in M Piazzi Smyth's work on the Great Pyramid, the stones at the sides being of great size—12 feet by 6 feet This channel is evidently of ancient construction It is built in lengths, as though the work had been commenced at several points, and had not been directed correctly. The plaster is in good preservation

'The aqueduct was traced for 700 feet, and at either end it was found to be crossed and

used by the present low level aqueduct, it being at the same level, but the entrances are much farther up the hill, on account of the cutting being so deep, in one place 29 feet below the present surface

'It is apparent that the builder of the present low-level aqueduct made use of the origina one wherever it was convenient'

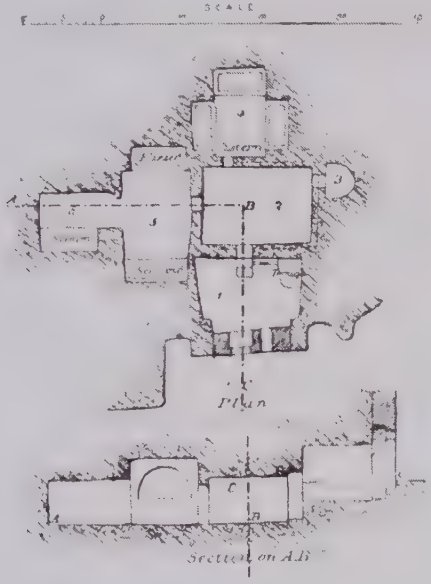
Bîr el Yehûdîyeh or Shem'on es Saddîk

This well is so-called because it is immediately near the traditional tomb of Simon the Just, of which a plan has been now made. This tomb is in Wâdy el Jôz, east of the Nablus road It is mentioned in Finn's 'Byeways,' and the annual visit paid to it by the Jerusalem Jews is there noticed. 'Simon the high priest, the son of Onias (Ecclus. l 1), was one of the famous successors of Ezra, and chief of the "Great Sanhedrin"' He is said to have gone to Antipatris to meet Alexander the Great (Tal Bab Yoma, 69 *a*), and was high priest for forty years The beautiful story of his last entrance into the Holy of Holies, when the white apparition failed to meet him as usual, is well known. He ranks among the most venerated of Jewish worthies. Curiously enough, Josephus gives the name of Jaddua instead of Simon, as that of the high priest at the time of Alexander's visit to Jerusalem

The tomb is rock-cut, but a wall has been built in modern times across the entrance to the porch, and an iron door put up, with a small barred window on one side This door is kept locked, and the key was obtained from the Spanish Jews through the kindness of Dr. Chaplin

The façade is carefully white-washed; within is the antechamber, $2\frac{1}{2}$ feet below the present surface of the outer ground A small cistern is cut in the rock bench to the right, and a channel leads thence, round the walls of the next inmost chamber (No 2), to a hole in the wall communicating with another chamber (No 4), which was originally a tomb, with three *loculi* under *arcosolia*, but is now used as a cistern with a depth of some 3 feet of water There is no spring, but the surface-water from the rocks is collected in this manner The second chamber (No. 2) has a single grave on the east (No 3), and an entrance on the west to the fourth chamber (No. 5). the level is $2\frac{1}{2}$ feet below the antechamber. The fourth chamber has two *loculi*, that on the north being the supposed

tomb of Eliezer, son of Simon the Just, that on the south the grave of his servant. A small wooden table stood in this chamber. On the west a door leads to the furthest chamber (No. 6), where is the grave of Simon himself on the south side. It is apparently only a bench built up of small rough stones; but these may cover a real rock-cut sarcophagus. A large vessel of oil was placed on it, in which floated many lighted wicks. I noticed a great many small stones piled in the *loculus* of Eliezer, probably memorials of visits to the shrine, like the *Meshâhed* of the Moslem peasantry.

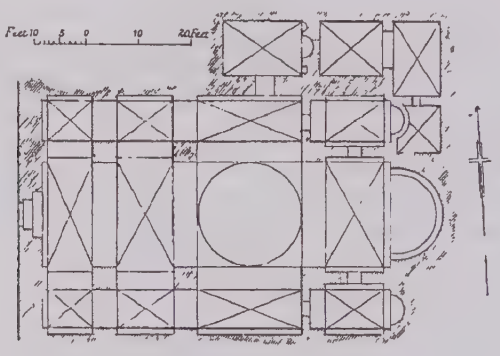


The Jews also show some 200 yards to eastwards a quarry facing northwards. This they believe was the school and synagogue where Simon the Just used to teach and pray. The tradition has, however, probably little or no value.

The tradition of Simon's tomb is at least three-and-a-half centuries old; but there is, so far as I know, no mention of it in mediæval Jewish travels before the year 1537 A.D., when it is noticed in the Jichus ha Aboth.

Deir es Salîb (the Monastery of the Cross).

The old Georgian Church, said to date from the fifth century, was found standing by the Crusaders The tradition is to the effect that the tree of the Cross, concerning which there are innumerable mediæval legends, grew here from the time of Adam, and was watered by Noah, David, and Solomon The site of its growth is shown in a little chamber behind the north apse The church consists of three bays, a transept with a fine dome, and a chancel with three apses, built for the Eastern rite, with walls dividing the apses On the south wall of the central apse a *graffita* was found in 1873, in red paint, reading *Beatæ - - - a Jehan*,



with date 1493 A D This part of the church is therefore older than the restorations of the year 1644 A D The floor of the church is paved with mosaic, which has in places been mended with good faience work. The designs are curious, including the cock and other quaint animals The piers and walls are painted and hung with pictures of Georgian origin, not unlike the frescoes of Kasr Hajlah (Sheet XVIII.), though probably later than the latter The place now belongs to the Greeks, and there is a seminary in the monastery, which has a conspicuous belfry and a good library. The best MSS. from Mar Saba have lately been brought to this library. On the screen of the nave is a curious painting on wood, giving the whole history of the tree of the Cross

Visited 1873 and 1881.

Hakk ed Dumm.

There is a very fine rock-cut and masonry vault at this place, 30 feet long, 20 feet wide, and 34 feet high, with two piers of drafted masonry with a rustic boss. The stones are of moderate dimensions and very white; the top course is arched out to support the roof, which is groined and of rubble. This vaulted building resembles Crusading work.

The vault is now called Aceldama, and in the twelfth century Chaudemar was apparently its name, a corruption, as is the present name, of the Hebrew. The lower part of the vault is a great rock-cut trench. Tombs exist in the sides. The vault is the vestibule to a series of tombs now choked up. There are crosses and Armenian inscriptions on the west wall.

Immediately west is a quarried scarp covered with rude crosses, cut on the rock. There are four rows, some 30 or 40 crosses in all. The form of the cross is Latin.

Immediately east of Hakk ed Dumm is the cave called Ferdûs er Rûm, it is some 35 feet high, and 10 by 6½ yards area.

El Heidhemîyeh (Jeremiah's Grotto).

The identification of this site with Calvary is mentioned in a separate paper, and the cliff described. A modern enclosure has been walled in on the south against the face of the cliff, and within this is the entrance to a cavern, with an inner circular chamber about 100 feet in diameter, the roof supported by a pillar. The tombs of Sultân Ibrahim and of Barûh ed Din are here shown, and the caverns are now in charge of the Moslems. They were formerly inhabited by an order of derwishes. Other caverns are entered from the courtyard. The whole system appears originally to have formed part of the Cotton Grotto, or great quarries under the city east of the Damascus Gate. The great fosse, which separates the knoll of Jeremiah's Grotto from the cliff of the Cotton Grotto, is 500 feet wide. It was no doubt originally formed in quarrying the Temple stones, and probably enlarged when the third wall was built. Two smaller caves higher up the cliff are now left unapproachable.

The remains on the knoll 300 yards west of Jeremiah's Grotto, and west of the main north road, are also mentioned in connection with the ancient tomb there found, which may perhaps be identified with the Holy Sepulchre. The remains of the old Church of St. Stephen at this spot require, however, a special notice, as it is the site of one of the oldest Christian buildings near Jerusalem.

The site in question is an irregular rock plateau rising about five feet above the surrounding surface, and apparently scarped on all sides. The scarp is indeed plainly traceable, and evidently artificial, except towards

the south-east. The area is about 60 yards either way. The top of the plateau is sown with corn, and has a few olive-trees. At the south-west corner a part of the rock rises in a kind of natural wall about 5 feet higher than the rest. A modern cottage is built against this scarp on the east face of it, with a paved court in front. To the south of the cottage is a small cistern, and a cave in the south scarp now closed.

The tomb, specially described on another page, is at the south-east angle of the plateau (marked A). In the north-east corner is a cistern measuring 15 feet by 20 feet, with a manhole in the roof, and an entrance

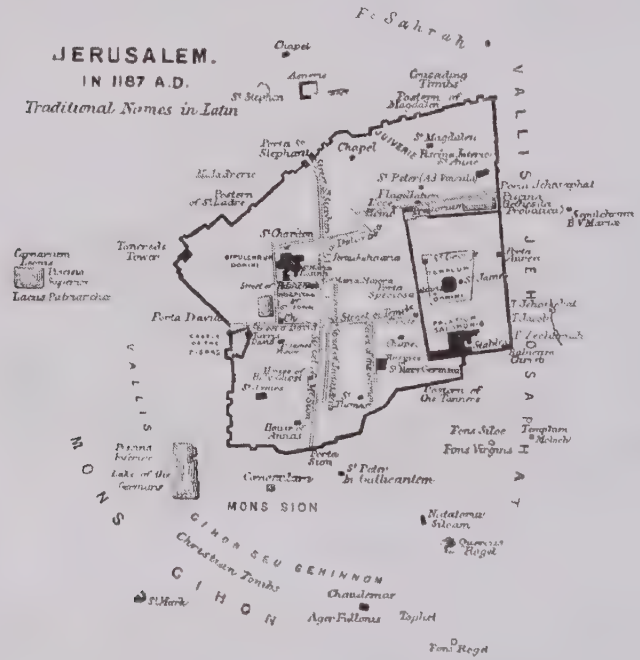
on the east, through a passage 10 feet long, 3 feet wide, with three steps This passage was once closed by a door (marked cistern C). To the west of this the scarp projects northwards, and a small chamber (marked D) is cut in the east face It measures 10 feet north and south by 7 feet east and west, and is 4 or 5 feet high. The door is 2 feet wide and 3 feet high

In the drystone wall of the courtyard of the cottage several fragments of mouldings are built in. One is a piece of a cornice with cantilevers and rosettes rudely executed and resembling Byzantine work Marble *tesserae* were also found here, and square stone slabs about 6 inches side,

built diagonally (as in the *opus reticulatum*) into a curved wall in front of the cottage on the east This wall was destroyed, and the slabs used to pave the courtyard of the cottage. In the south scarp a small excavation was found—a niche 3 feet 4 inches high, 4 feet 6 inches wide, 2 feet 7 inches to the back, having a smaller recess about 2 feet across in its back wall. A skull is said to have been found in this recess when the scarp was uncovered.

Josephus gives the distance of the Tomb of Helena, Queen of Adiabene, as being three stadia from the Women's Towers (2 Ant iv 3;

5 Wars ii. 2). There can be little doubt that the tomb in question is that now commonly called the Tomb of the Kings, and if a measurement of three stadia be made on the Ordnance Survey from that sepulchre southwards along the main road, it will be found to reach to the rocky plateau just described. The scarps may thus be very probably regarded as those on which the wall of Agrippa stood about 41 A.D., and the Women's Towers were perhaps situated at this point, guarding the north gate of the ancient wall.



The remains found on the plateau are possibly those of the old Church of St. Stephen, founded by the Empress Eudoxia about the year 460 A.D. It was about a stadium from the north wall, as existing in her time (Evagrius, Hist. Eccles. i. 22). The empress was buried in or near this church, according to the same authority. The building was found by the Crusaders in ruins (Sœwulf). In the Citez de Jherusalem the Monastery

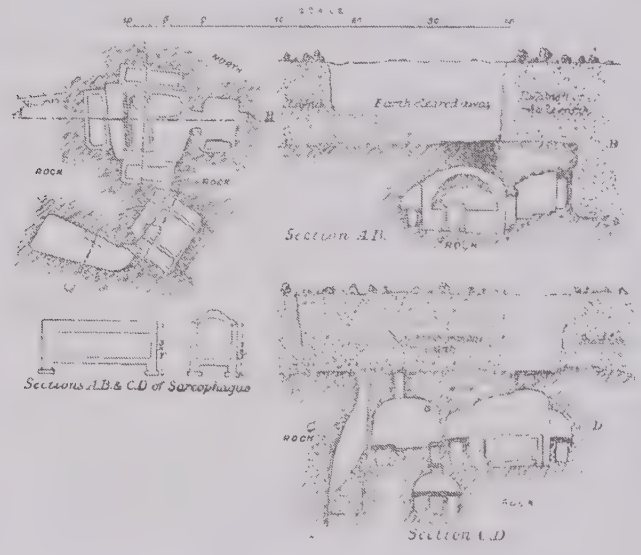
of St Stephen is distinctly described as being on the right of one entering the north gate, the Asneric being to the left If the roads remain unchanged this would point to the site now being noticed as that of the Church of St Stephen It is, however, remarkable that no traces of Crusading work remain on this site, but that a Crusading church does exist, as described later, north-east of the plateau of rock.

The road bifurcates on leaving the Damascus Gate, and here—120 yards outside the gate and south of the rock plateau above described—a tomb was discovered in 1875, containing a sarcophagus of great size—8 feet long by 3 feet high The tomb appears to be older than the sarcophagus, which could not have been got in through the door, and may have been lowered through the hole in the roof of the chamber The sepulchre consists of two chambers, which seem to have been originally distinct tombs with doors to the east The north chamber, containing the sarcophagus, has an antechamber on the east containing a *loculus* on the south side the chamber itself has three *loculi* under *arcosolia* The southern chamber, reached by a hole in the back of the *loculus* on the south side of the former tomb, has also three *loculi* The north *loculus* in the southern chamber has slabs at the bottom, which when raised disclosed a sunken chamber with three parallel *loculi*. On the south of the southern chamber is a rude cave like a cistern. The rock is at this place covered with about twelve feet of soil and rubbish The hole in the roof of the northern chamber was carefully closed with masonry, as were the doors of the chambers The southern chamber was the first discovered, and was entered through its roof, where were two holes covered by stone slabs

These tombs might perhaps belong to the later Jewish period, but they so closely resemble the Christian tombs round Jerusalem that they may perhaps be better referred to the Byzantine period. Their arrangement is different from that of the old tomb (A) in the rock-scarp further north The sarcophagus is like those used by Romans and Byzantines in Syria The Crusaders seem to have used lead or wooden coffins Thus, though the sarcophagus is evidence of a secondary interment in this sepulchre, no great difference of date need be supposed between the times of the original tomb and the later interment, and it is probable that

both would be Christian, as the Christians do not appear to have used Jewish tombs.

It has been suggested that the sarcophagus was that of the Empress Eudoxia, buried near St. Stephen's Church; and there is nothing to contradict such a conjecture, although no inscription was found on the sarcophagus, which was broken by the Turks in attempting to remove it. The tomb was partly destroyed also, and has now been converted into a cistern.



Just west of El Heidhemiyeh the remains of the twelfth century Asnerie were explored in October, 1873, and further opened up in May, 1875.

Entering the gate in the north-west corner of the garden, west of the cliff, a scarp of rock is found running east and facing south (level of top 2,520). In this, towards the west, is a rock-cut chamber which runs in northwards. East of this are cuttings on the scarp which would seem to have been connected with piers supporting vaults.

The chamber is double, and has a double door. The right-hand, or

eastern part, contains three *loculi*, 8 feet 2 inches in length. This part is 7 feet high. On the east wall two crosses are painted in red, each with the letters A and Ω either side The cross is of the Latin form. The western chamber is 6 feet 2 inches by 11 feet 8 inches, the latter measure north and south A great quantity of bones were found in this chamber

South of this tomb is the cistern marked on the Ordnance Survey, which appears to be very extensive, and is cut in rock. Near it stone piers were discovered by excavation in 1873 The stones were two to three feet in length, well dressed, on one a mason's mark—

occurs, leaving no doubt that the masonry is of Crusading period The stone has the diagonal dressing found on twelfth century work in Palestine A marble capital and the base of a small attached column were found, with a pillar shaft 1½ feet thick

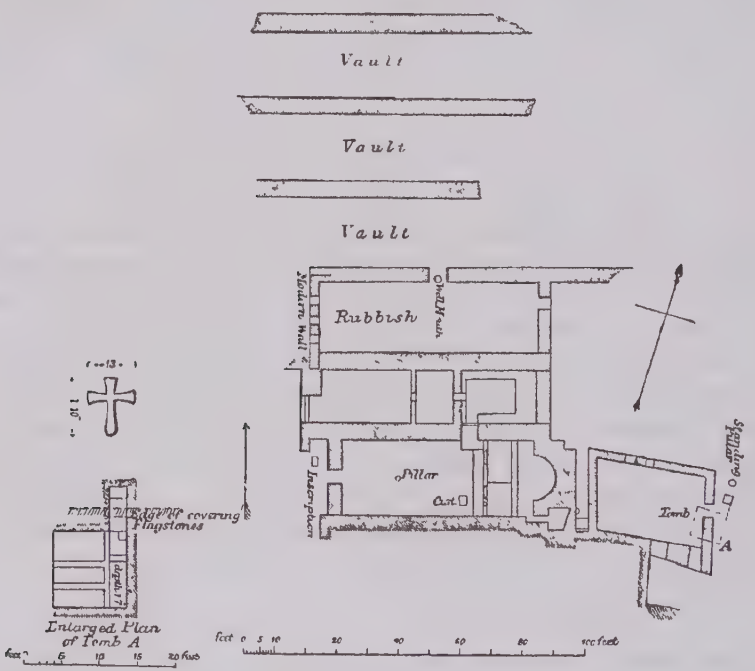
About 40 paces south of the gate by which the plot of ground is entered, the excavations in 1875 laid bare the remains of a building, viz, a wall of masonry, resembling that described above, running north, with a second at right angles running east The wall running north extended 33 feet 6 inches, and ended apparently at a gateway. From this wall, 0½ feet south of the gateway, a cross wall ran east The south wall running east from the angle was laid bare for about 36 feet Both walls were 6 feet 6 inches thick

Inside the southern wall are a row of stone mangers, each 1 foot 9 inches broad, the stone walls between them are 4 inches thick; they measure 2½ feet north and south at the top, and 1 foot 10 inches at the bottom, being 8 inches deep, and having a shelving front, whilst the back is formed by the southern wall of the building

The scarps on the north and east show that this building probably covered an area of about 150 feet side. The position agrees with that ascribed in the 'Citez de Jherusalem' (1187 A D) to the Asnerie, or Inn of the Knights Hospitallers, which was in use after the conquest of Jerusalem by Saladin.

Explored October, 1872; 24th May, 1875

About 500 feet north-west of the Asnerie a Crusading Chapel, with surrounding chambers and a vault on the east containing graves, was excavated in 1882. North of the chapel lies a kind of trough cut out of a single stone 3 feet in diameter, 3 feet high, the hollow interior being $2\frac{1}{2}$ feet deep, and the same in diameter The trough is rounded off



below. It seems possibly to have been the font of the chapel, and to have stood on the low pillar found in the chapel near the west end. The little Moslem shrine of Sâd and Sâideh, north-west of the chapel, is built partly of Crusading materials; and outside the Mihrab the projection of the south wall rests on a defaced sculpture of an angel's head, in mediæval style, probably taken from the church.

The following are the accounts sent home in 1882

'I

'*January* 18*th*, 1882

'The church of which I sent a plan by last mail has been further excavated, and an interesting piece of painting brought to light A slab of fine limestone 20 inches by 4 feet 5 inches has on it a simple cornice, once apparently gilt, and beneath this are the figures of the twelve Apostles, each surrounded by a sort of canopy, they stand six each side of a central figure of the throned Christ. The figures are rather stiffly drawn, and have long robes The slab has on the top surface the diagonal dressing used by the Crusaders

'Only a few courses of the walls of the church are standing, they have been plastered inside, and the plaster was painted. I found a mason's mark on one stone, and others have the diagonal dressing North of the church are found vaults with pointed rubble arches The whole is evidently of the Crusading period We are going to-day to take a tracing of the painted tablet, which will be sent home as soon as possible The position of the church precludes the idea that it is that of St Stephen, built in the fifth century It seems to have been rather a chapel adjoining the Asnerie or Hospitallers' Stable, which I was able to identify in 1873 with certain ruins close to the newly found church on the south

'C R C'

'II

'Jerusalem, *February* 15*th*, 1882

'The excavations at the newly discovered church outside the Damascus Gate are still in progress, but have been greatly impeded by the recent rains and falls of snow The work has been done principally at the ends of the church, that is to say, towards the east and towards the west of the building The outer surface of the east wall of the church—that in which the apse is built—has been laid bare. Parallel to this has been discovered one wall of a second building, perhaps a convent in connection with the church The passage left between the two buildings is only 3 feet 4 inches in breadth, and the stones of the convent have a remarkably clean and new appearance, as if the wall had only been recently constructed This is no doubt due to the protection which it received from the church immediately in front of it. Moreover, the passage between the two may very possibly have been covered in, and an additional protection thus afforded to the surface of the stone.

'The north wall of the convent has also been laid bare for a distance of some 30 feet, but the eastern extremity has not yet been reached It is built of larger blocks of stone and more solidly, being no doubt an outer wall, and appears to have been exposed to the weather before having been covered in by the earth which has just been removed

'The workmen say that they have discovered a cistern in the passage between the church and the convent It may, perhaps, exist, but yesterday while examining the place by ourselves we were unable to find the mouth

'A new door has also been discovered at the south-east corner of the church It opens out towards the east, and is situated between the apse and the south wall There is a fresco inside under the doorstep, but to see this and the door properly further excavation is necessary

'At the west end of the church the ground outside the main entrance proves to have been paved with flag-stones to a distance of eight or nine feet from the wall To the left on entering the paving extends to the entrance to a tomb, and at this point an inscription has recently been discovered

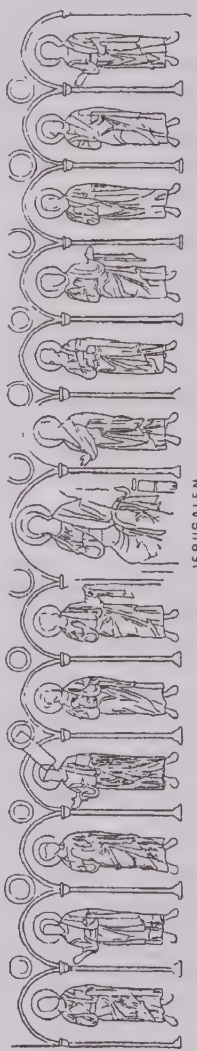
'Further again to the west, at a distance of 31 feet from the church, a wall has been found running north and south The extremities of this wall have not yet been laid bare, and its connection with the main building is not clear

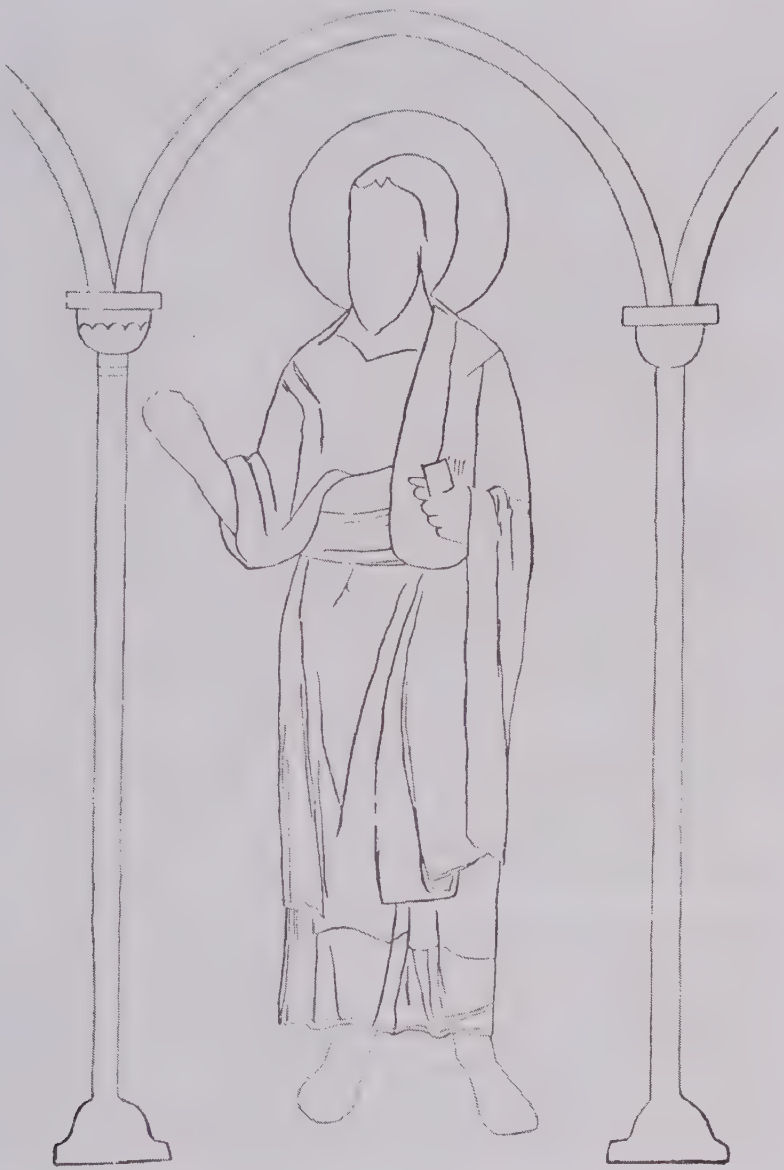
'The point which has excited most interest is the inscription referred to above It is cut in one of the flag-stones (measuring 23 inches by 16 inches) over the tomb. The letters are of the well-known uncial forms, and in some instances are well cut The surface of the stone is, however, much worn, so that in places it is very difficult to distinguish artificial and time-worn grooves I send a copy of the inscription traced from a squeeze, and have shown as far as possible the distinction between marks certainly intentional and others which are doubtful

'As yet no one has been able to suggest a translation In the first line the word ΦΕΡΟΥ is very distinct Dr Chaplin thinks that the marks shown in outline adjoining the letter Φ may be a contraction for ΧΡΙCΤΟΦ, making the whole word ΧΡΙCΤΟΦΕΡΟΥ, or Christopher In the second line the only doubtful letter is the Δ, which has been read Λ. However, it seems to me that a horizontal stroke is visible, although not nearly so plain as the rest of the letter As regards the third and fourth line, there is little difference of opinion, but below the word ΟΟΤΑ are a number of marks in which it is almost impossible to distinguish those which are time-worn from those which are artificial

'It has been suggested that we have only recovered a part of the inscription, the stone on which it is cut having formed portion of a block employed previously for some other purpose, and that we have lost the right half or the left half of each line An examination on the spot shows, however, that this is improbable

'The flag-stone is *in situ*, above a tomb—a very natural position for a tomb-stone It is close to the door of the church, and the workmen would not be likely to disfigure the floor in such a place with a previously used stone, when a new one might be so easily obtained Moreover, the tracing of the squeeze shows that the present inscription could nowhere be cut through at right angles to the lines without dividing some of the letters If the inscription had been originally longer it is unlikely that it could have been cut in two without thus dividing the letters, but along each side of the stone as it now stands there is no trace of any such prolongation of the lines. In all probability we have



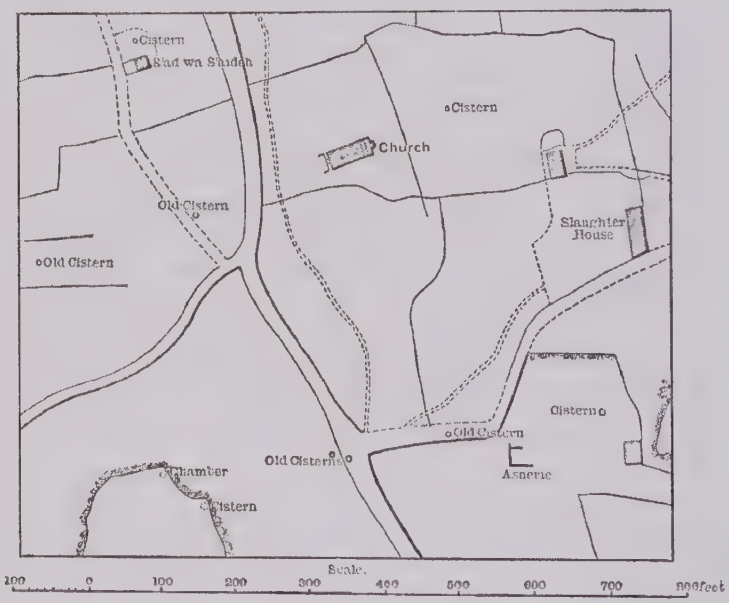


before us the whole inscription, and it only remains to decipher the contractions which it no doubt contains.

'The enterprising owner of the church intends to continue his excavations. Unfortunately the ground outside the south wall does not belong to him, otherwise he might have found chambers and tombs similar to those on the north. He intends, however, to work in an east and west direction, and to uncover the walls as far as he is allowed to do so by his neighbours.

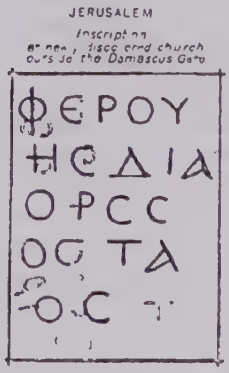
'A. M. MANTELL, Lieutenant R.E.'

NOTE.—The word φεῖου suggests that we have here the end of the usual funerary inscription, Μνημα διαφεῖου. (See under head Wâdy Rabâbeh).—C. R. C.



A further note on this church was sent by the Rev. S. Merril, in 1883 ('Quarterly Statement,' p. 238). It appears that there was a chamber with a mosaic pavement east of the chapel. The letters OC OY were legible in the mosaic. A water channel cut in rock, reaching 37 feet east and west, was found north of the mosaic floor, and seems to be older than the building. It is 2¼ feet deep, 20 inches wide at the top, and 12 inches at the bottom. It turns north, and runs for some 20 feet. There are three large cisterns under the buildings.

Another tomb was found in the north-west corner of the chamber, with mosaic floor about 6 feet below the floor. It is 10 feet long by 9 feet wide with a doorway 2 feet wide, and steps on the north-east On the east wall a cross is cut in relief, 22 inches long by 13 inches wide. On the left of the cross are letters deeply cut, and 5 inches long, giving the initials KX ('the Lord Christ') The *loculi* are 2 feet deep in the tomb, which resembles that planned by Lieutenant Mantell



About 200 yards north of the Asnerie, close to Captain Wilson's Excavation No. 2, is a curious tomb It is 20 yards south-east from a house, with cistern No. 81 to the south, and another cistern to the east

A scarp 7 feet high is here laid bare, running for 25 feet north and south At the north-west corner it turns east, and at the south end it runs west, and was traced 8 feet A plastered cistern has been built against the north face of the scarp A building seems to have stood on the top, with a tesselated pavement visible in two places

Two rock-cut tombs exist in the scarp, which have their entrance from the west, and shafts reaching up to the surface of the ground The southern tomb has two *loculi*, one each side, and a third at its east end directed north and south The *loculi* at the side are 5 feet 10 inches by 1 foot 7 inches, and 1 foot 5 inches deep There is an *arcosolium* over each The end *loculus* is 4 feet 7 inches long, 1 foot 2 inches wide

The northern tomb has only two *loculi*, one at the end being 3 feet 7 inches long.

The shafts are 5 feet 10 inches long, 2 feet across, and the height to the top of the shaft from the floor of the tomb is 7 feet 6 inches.

Half way up the shafts, which are open on the west side, there are two grooves (one in each shaft), 2 feet 1 inch above the *arcosolia*, they are 4 inches deep and high Into these slabs of stone fitted, dividing the shaft into two tiers Some of the slabs were found near

The *loculi* were full of bones and powdered bone-dust, pronounced by Dr Chaplin to be ancient

Five feet 10 inches north of the north tomb is a niche or excavation, as though for an unfinished tomb

These tombs resemble that described above near the Asnerie, and in common with all the rock-sunk tombs having shafts to the surface, may perhaps be ascribed to Christian times The scarp may have been cut at a later period, laying open the west end of the chamber originally reached only from above The building over the tombs may also be later.

Immediately south of these tombs is the tank, the north wall of which is formed of four very large stones, resembling those of the Haram walls. Sir Charles Wilson's Excavation No 2, at this spot, showed the stones to be probably not *in situ;* and on digging a trench across the line on the west no further continuation of the line of masonry could be found The stones have smooth faces, and drafts 5 inches wide and $\frac{1}{2}$ inch deep. The three eastern stones measure about $7\frac{1}{2}$ feet, 5 feet and 11 feet 9 inches respectively in length

Further west (as marked on the Ordnance Survey) was another line, consisting of five stones resting on the rock, which has not, however, been cut to receive them This group was carefully examined by Sir Charles Wilson, his Excavation No 3 determining that the stones were underpinned with small ones, and perhaps not *in situ* The row could be traced further west, and several large stones were scattered near in front of the line The four stones excavated had together a length of 21 feet The height of the course was 4 feet 4 inches, the drafts were 3 to 4 inches broad, the faces were left rough, projecting sometimes 6 inches.

These stones have since been destroyed Together with the first group, there can be little doubt that they once belonged to the wall of Agrippa, but there was doubt as to their being *in situ*, as they seem to have been re-used.

Visited October, 1872.

The Scarp on the (Modern) Sion Hill

Hŭmmâm Tŭbarîya (or Dâûd) —The rock scarp of Jerusalem ('Quarterly Statement,' October, 1872, p 169, January, 1875, p 7, April, 1875, p 81; Ordnance Survey Notes, p 61) was here excavated by Mr Maudslay in 1874-5

Corner Tower.—The angle of the scarp is occupied by a square rock foundation, intended for a tower, and facing approximately north and south. The top of the scarp is at a level 2,483 above the sea. The tower foundation measures 48 feet north and south by 50 east and west, and is 20 feet high on the west edge of the scarp. In front of it on this side is a flat platform of rock 20 to 25 feet broad. Rock-cut steps lead up eastwards from this along the southern face of the tower scarp. The platform ends in another scarp on the west where the rock is 12 to 20 feet lower.

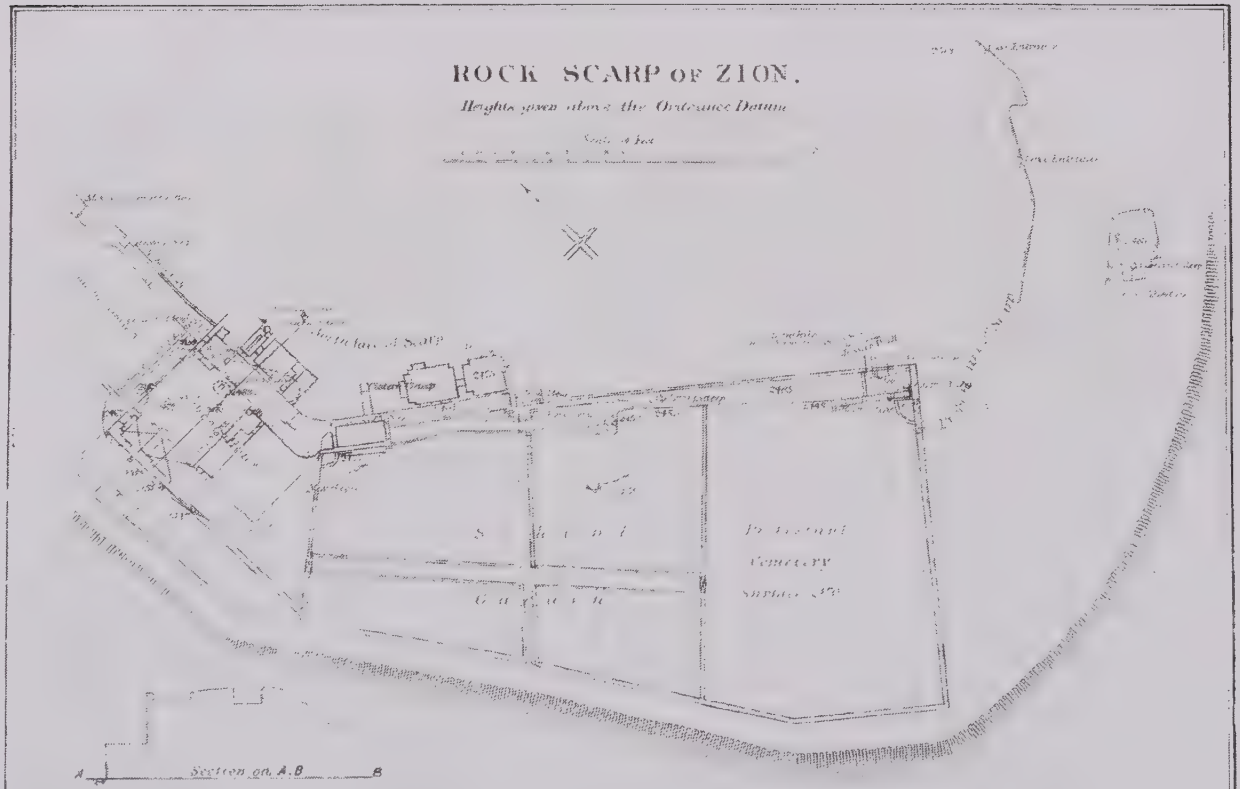
West Scarp.—The scarp runs northwards from the tower, with an average height of 22 feet. It was traced for over 100 feet, and points towards the present south-west corner of the city wall. In the flat surface of this part of the scarp a cistern 12 feet deep and 12 feet diameter is cut just north of the tower, and further north is a small rock-cut trough. Fragments of mosaic pavement were found during the excavations in this part. At the north end of the excavation is a rock buttress 8 feet by 4 feet. There were also many stones 3 to 4 feet long, with deep marginal drafts and dressed faces, they appeared to have fallen from above. In one was a round-headed loop-hole 6 inches diameter outside, 1 foot inside. These stones Mr Maudslay built up, in 1874, into the wall marked 'Modern wall of ancient masonry'.

The platform in front of this northern part of the scarp is under the cemetery of the Greek Catholics, and was therefore not traced.

South Scarp.—From the corner tower the wall of rock runs south for 45 feet, and then turns through an angle of some 40° east, and runs for 110 yards in the direction shown on the plan. Its top is about the level of that of the tower for 115 feet, and then rises to the level 2,485, or 4 feet higher. At the eastern end the bottom of the scarp is at a level 2,435, giving it a total height of 50 feet for over 150 feet along the line.

The scarp appears to have a width of about 30 feet, and the rock shelves down on the inner or northern side, at least in one part, where the foundations of a room were sunk 14 feet lower than the level of the south front of the scarp before reaching the rock. This point was 100 feet from the angle. (A cistern may, however, exist here.)

Behind the corner tower there is now a large cistern in the scarp


ROCK SCARP OF ZION.
Heights given above the Ordnance Datum
Section on A.B
A
B

40 feet by 15 feet and 8 feet deep. There are two others, as shown on the plan, 12 feet and 8 feet deep behind the large one, which latter was made by Mr Maudslay by blowing three small ones into one. All these cisterns are rock-cut, but the rock was found to shelve down on the inside behind (*i e* east of) the tower to about the same level mentioned in the preceding paragraph The scarp was therefore a broad wall of rock standing up 10 to 15 feet above the outer platform, and perhaps 14 feet above the inside surface, with an average width of 30 feet.

In front of the south scarp near the corner there is a chamber, now a laundry, with a floor of rock on a level 2,472, or about 5 feet above that of the outer platform. The face of the scarp forms one wall of the laundry, and in this is a trough with an *arcosolium* above like a *loculus*, and by it are two small mangers in rock. (Compare Kh Dustrey, Sheet V, Section B)

At 115 feet from the corner the scarp rises vertically 4 feet higher, at which point a rock-buttress projects 5 feet from the scarp A cistern 12 feet deep was found behind this buttress, and another masonry cistern, now broken to pieces, was at one time built in front of the scarp and lined with hard reddish cement. This seems to be later work.

The platform outside the corner tower was traced southwards, and found to be 20 feet wide at the angle It runs in towards the scarp at the laundry. A new cistern was here found to be built just at the edge of the platform

At a point about 170 feet from the angle the rock-scarp was found to be 26 feet high, and had a platform 20 feet wide outside. It seems, therefore, that the platform follows the course of the scarp up to this point, when it terminates, and a step occurs of 7 feet down, the total height of the scarp being immediately afterwards 33 to 35 feet

In front of the termination of the outer platform a ditch was found It was about 30 feet wide, the rock outside being on the same level with the platform This ditch may perhaps run along the whole face of the work, but it was not followed out. It appears to slope down eastwards or drop suddenly, for at the far end of the scarp—110 yards from the angle—the total height of the rock-wall is 45 feet.

During the excavations along the southern scarp stones were found, some being voussoirs of large semicircular arches. Bases about 1½ feet

diameter were also found, and corbel stones Also a tombstone with an inscription in Gothic characters *Hic requiescit Johs de Valencinis* Stones appear to have been quarried out from the ditch in front of the outer platform, the marks of the quarrying still remaining

At the further or south-eastern end of the scarp there appears to have been a tower, the top of the tower-scarp being at a level 2,473, or 38 feet above the bottom of the scarp The tower projected 25 feet A flight of steps (explored by Sir Charles Wilson) led up the face of the scarp towards this tower Sir Charles Warren and Mr Maudslay found them to reach the rock 37 feet below the top of the scarp. There are two flights, the upper of 9 steps, the lower of 27, or 36 in all, with a total rise of 32 feet, the breadth of the flight being about 4 feet, and the length, including the landing, 45 feet

The scarp in this part forms the boundary of the Protestant cemetery, which has a level 2,470 at the surface, and a depth of over 35 feet of soil, all composed of *débris*

At the top of the flight of steps above described there are two cisterns to which the name Ḥŭmmâm Tŭbariya is given. They are cut in rock, with steps on the floors, having 6 feet of water at the back. The roofs are of masonry—a barrel vault, with narrow keystones and broad haunch stones. The masonry is of moderate size and very well cut, not drafted. The cisterns are respectively 10 feet by 6 feet and 10 feet by 4 feet

East Scarp—Mr. Maudslay's excavations were not pushed further than the eastern cemetery wall, which runs out of the scarp of the second tower Beyond this point the scarp is covered up with rubbish for about 70 feet, and then re-appears, running north-east and rudely cut There are three cave-entrances in it in this part, leading into small rough caves explored in 1872

There appears to be a ditch in this part 45 feet wide Its depth is unknown, as it is filled in with soil and *débris* The opposite or outer side is formed by a rock counter-scarp, the level of the top being 2,480, or 20 feet lower than the scarp, which is 2,500. In this counter-scarp there is a small cistern 9 feet deep, lined with cement. A second cistern, now filled up, exists close by.

Resumé—The scarp is thus seen to extend over 800 feet, as at

present traced, and to run round three sides of a trapezoid. It appears to have two towers 370 feet apart, and perhaps one intermediate The greatest sheer height is 45 feet. In the neighbourhood of the angle there is an outer platform averaging 20 feet in width, and 10 to 15 feet below the top of the scarp

There is also in one part a ditch 30 feet wide and 7 feet deep in front of the outer platform.

The scarp is, near the angle, about 30 feet wide, and slopes down on the inside.

There are altogether 18 cisterns, which supplied the scarp buildings with water, and two flights of stairs, one in connection with each tower

The direction of the scarp, east of the Protestant cemetery, is not fully explored. On the west the scarp runs in the continuation of the line of the modern west city wall

The masonry which stood above the scarp seems possibly to be of Crusading origin (judging from the loophole), and is connected with Crusading remains, *i e* the tombstone *

Visited July, 1872, January, 1875 Surveyed by a traverse with chain and 5 inch theodolite and compass.

Jebel Deir Abu Tor ('Mountain of the Monastery of the Father of the Bull').

The hill south of Wâdy Rabâbeh, called by Christians since the fourteenth century 'the Hill of Evil Council,' and supposed to have been the site of the country house of Caiaphas, where Judas plotted to betray Christ The little modern shrine of Abu Tôr ('the Father of the Bull'), with a large solitary tree south of it, possibly marks the site of an old monastery of St Mark It is now consecrated to Sheikh Ahmed eth Thoreh, who is said to have accompanied Saladin riding on a bull. (See Name Lists, p 318)

* It has been suggested by Captain Conder that the rock-cut ditch outside this scarp is the 'gutter' mentioned in connection with David's siege of the Upper City (2 Sam v 8) The Rev F W Birch, however, supposes this gutter to be Warren's shaft to the Virgin's Pool, as he adheres to the view that the City of David was south of the Temple

Jebel et Tor (the Mount of Olives)

The principal places of interest on the mountain are the Church of the Ascension, the Cave of St Pelagia, the Pater Noster Chapel, the Bethphage Chapel, the Tomb of the Virgin, Gethsemane, and the Grotto of the Agony, with the remains found near the shrine of Sheikh Selmân el Farsi, and the Russian House, south-east of the village of et Tor. The so-called Tombs of the Prophets, on the south-western slope of the hill, also require notice.

The Church of the Ascension is now a small chapel inside an enclosure of irregular polygonal form, measuring about 40 feet north and south by 30 east and west. This enclosure was built probably as late as the seventeenth century; and a minaret stands close beside the west entrance, being one of the most conspicuous objects on the mountain. The site is now in possession of the Moslems, but all Christian sects are admitted on certain days to perform mass in the chapel.

The site of the Ascension was placed in the fourth century on the present spot—the top of Olivet, and a basilica was here erected by Constantine. It appears to have been circular, and of great size. In 680 A.D. Arculphus gives a plan of a round church on this spot, the central part being without any roof. The foot-prints of Christ were then already shown in this church; his plan shows *two* such prints, with an altar on the east, and entrances on the south. There appears to have been an outer peristyle and an inner circle of columns supporting the roof, which extended from them to the wall, leaving the central part open to the air. This church was destroyed in the eleventh century, and replaced about 1130 A.D. by a Crusading Church, which was destroyed in 1187. A chapter of Augustine Canons was established in connection with this church. The present chapel was re-erected in 1834–35, on the plan of one built by the Moslems in 1617 A.D. on the ruins of the Crusading Church. It is an octagon with a dome, the upper circular drum and the dome being modern, while the octagon with its well-shaped pointed arches is apparently Arab work, though the small columns probably belonged to the Crusading Church.

Five pillar bases in the courtyard remain to show the plan of the

Crusading Church, and two richly carved capitals in twelfth century style are figured by the Duc de Vogué ('Églises de la Terre Sainte,' p 317, Plate XXIV.) The church was an octagon inscribed in a circle of 34 metres in diameter The interior arrangement seems to have resembled that of the seventh century church.

The Cave of St Pelagia, called by the Arabs the Hermitage of Adawî, or of Bint Hasan, is an ordinary chamber under the church towards the south-west. The Jews call it the Tomb of Huldah (2 Kings xxii 14.) An ante-room is entered from the west, and twelve steps lead down to the chamber with a sarcophagus, which is now a Moslem place of prayer. St. Pelagia of Antioch is supposed to have lived here in the fifth century, and the site is mentioned by various pilgrims since the twelfth century. Isaac Chelo in the fourteenth century calls it the Tomb of Huldah The vault was visited in February, 1874, and appeared to be entirely of masonry A Pagan Greek inscription was here copied by De Saulcy. (See Paper on Inscriptions)

The Pater Noster Chapel, south of the Chapel of the Ascension, is quite modern, having been erected in 1868 by the Princess de la Tour d'Auvergne, but it is supposed to stand on an old traditional site of the Middle Ages In the grounds immediately west within the precincts of the property, rock-sunk tombs like those at Kurm esh Sheikh were discovered, and in one of these were two leaden coffins with large crosses on them Fragments of mosaic and other remains were also found The coffins are important as serving to show that these rock-sunk tombs belong to the Christian, and probably to the Crusading period.

About thirty yards west of the chapel is a long narrow vault cut in rock It appears to mark the site of the old *Credo* chapel of the Crusaders. The vault was found full of earth in 1868, and excavated, it is about 10 feet broad and 26 feet long On each side are twelve rock-cut semi-pillars, about 1 foot 9 inches in diameter, and 6 inches apart. They are covered with plaster, and an altar is erected at the end of the vault It was visited on the 9th February, 1874, by Captain Conder.

The Bethphage Chapel was excavated in 1877 by Captain Guillemot and Frère Lièvin. It stands beside the road from Olivet to Bethany on the saddle of the hill above Bethany. A chapel, with an apse about 20 feet in diameter, was found, and a pillar base, showing that there were

two aisles about 5 feet broad On the south was a chamber or sacristy, entered from the aisle A square block of rock measuring 4 feet 3 inches by 3 feet 6 inches by 3 feet 10 inches in height was found in the north part of the chapel, apparently marking a sacred spot There were four frescoes of mediæval character on the four sides of this block. On the south the raising of Lazarus is represented, on the north the disciples fetching the ass On the west is a niche with an arched head, and an inscription painted beneath On the east is an unknown subject. The sacristy was also painted in fresco, with geometrical designs, and the walls of the chapel were frescoed.

This site is apparently that of the Crusading chapel of Bethphage, in which Theodoricus (in 1172 A D) mentions a large stone on which our Lord stood before mounting the ass to enter Jerusalem Nothing has, however, been found to prove that this is the true site of the village of Bethphage. Arculphus (680 A D) appears to allude to the site.

The inscriptions on the plaster were so much damaged as to be illegible, but the words *Hic est Bethphage* are legible on one fragment, with *Jerusalem* in the second line, and on another is the name Bernardi Witardi. The character is the Gothic of the twelfth century, and the language is Latin It is believed that the subject on the west side of the stone was the entry into Jerusalem That on the east seems probably to be the healing of Bartimæus, or the call of Zacchæus The niche in the stone on the west probably served for placing offerings or donations, as in other cases The Crusading dictum, *Hic est Bethphage*, on this stone is not in accordance with the Talmudic description of Bethphage (Mishnah Menakhoth XI, Tal Bab Sotah, 45 *a*), as being within the Sabbatic distance from Jerusalem. Perhaps the best suggestion yet made is that of M Clermont Ganneau, which identifies Bethphage with Kefr et Tôr, the village on the top of Olivet, but the actual site of Bethphage remains very doubtful

Other remains on the top of the mountain were found in building about 1870 They were visited by Captain Conder in 1874.

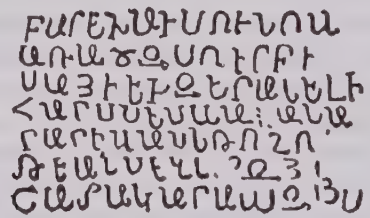
Just south of the kubbeh of Sheikh Selmân el Farsi is the Russian house on Olivet, which was the trigonometrical station of the Survey. In the grounds several ancient remains were found. In the hall of the house is a beautiful tessellated pavement (drawn by M. le Comte),

representing animals, fish, apples, geometrical patterns, etc., with an inscription in Armenian

East of the gate into the garden, and close to the house, is a rock-cut chamber, with a vault of modern masonry It measures 23 feet 4 inches by 13 feet 8 inches, and contains 16 sarcophagi or graves, arranged in four groups of four, with a passage between. These were closed by slabs, and on three there were inscriptions dimly discernible

North of this vault are foundations of a building, apparently a chapel, with piers 2 feet square This was excavated for a distance of 38 feet The piers are 8 feet apart, the bearing of the building is 85° in the direction of its length. It had a tessellated floor, the masonry is small, and the stones soft A fragment of cornice lying near was sketched.

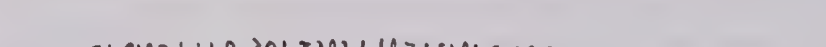
South-east of this is a cave, with a modern vaulted chamber in front On the floor of this chamber is an inscription, the characters similar to those in the house, and also made of well-fitted tesseræ covering the whole floor. Just north of the house is another tessellated floor, visible on the surface of the ground



The cave within is rude and full of bones. Divisions of masonry were made in it, forming *loculi* or sarcophagi of unusual breadth along the walls

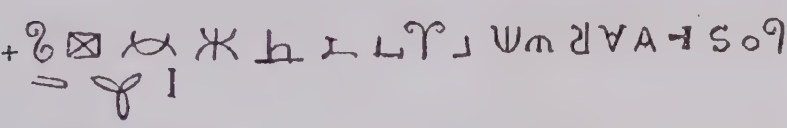
Beneath the floor of the house there are said to be other tombs, which can be reached through a masonry trap door

The inscription on the pavement in the house was copied as follows:



All these remains belong probably to a mediæval monastery.

The present church of the Tomb of the Virgin was built in 1103 A.D., and is one of the best preserved of Crusading buildings near Jerusalem. The following are the masons' marks which have been collected on its walls



These are valuable for comparison, as the age of the building is known

The Tomb of the Virgin is first mentioned by St John of Damascus as existing in the time of the Empress Pulcheria (390-450 A.D.), and a church was erected over it by the Empress A church existed here in the eight century, but was in ruins in the ninth century It was rebuilt by Godfrey, and is described by Sœwulf It is mentioned by William of Tyre, and described by the mediæval pilgrims much as it now exists William of Tyre (XVIII. 32) mentions that Queen Melisinda, wife of King Fulk of Anjou, was buried in this church Her tomb is identified by De Vogué as the present altar of St Joachim and St. Anne. A monastery of black monks was attached in the twelfth century to the church, but was destroyed in 1187 A.D The church was given back to the Christians in 1363 A.D., and in the eighteenth century it became the property of the Greek Church.

The present church is a subterranean chamber reached from the southern façade—a Crusading structure—by a flight of 47 marble steps, 19 feet broad, a total descent of about 35 feet There are two side chapels about half way down, that to the right being the one supposed to contain Queen Melisinda's tomb, and that to the left being the traditional tomb of St. Joseph The church at the bottom is 31 yards long, east and west, by $6\frac{1}{2}$ yards wide, with an apse at each end The west apse belongs to the Abyssinians. In the east apse is the Armenian altar, and just behind it is the supposed tomb of the Virgin—a large sarcophagus, while a Moslem Mihrab has been cut in the south wall close to this tomb. The Greek altar is at the bottom of the steps. At the back of the church is another vault, reached by steps.

The grotto of the Agony adjoins this church on the east, and is reached by a flight of six steps It measures 18 yards by 9½ yards, and is 12 feet high. It is lighted from above, and the roof is supported by rock-cut pillars Towards the east there are traces of old frescoes on the roof It appears to have been originally a cistern, with a manhole in the roof In the time of Quaresmius (seventeenth century) an inscription was still visible in mediæval characters .

> Hic Rex Sanctus sudavit sanguinem .
> Sepe morabatur dum e
> Mi Pater si vis transfer calicem istu a me.

The cave was called in the Middle Ages Gethsemane or S. Saviour. The traditions respecting Gethsemane and the Agony are, however, found to be constantly shifting at various periods to new sites

The present gardens of Gethsemane are modern sites, and the Greeks and Latins have each enclosed their own.

The ancient tombs south of these sites at the foot of Olivet will be found under the head Wâdy en Nâr

The so-called Tombs of the Prophets on Olivet are situate near the top of the spur due east of the south-east angle of the Haram, some 300 yards south-west of the Church of the Ascension There is a circular chamber with two radiating passages leading to a semicircular passage, with 24 *kokîm* tombs There is a parallel curved passage intersecting the radii nearer the central chamber, and at the end of this is a chamber reached by steps, containing unfinished *kokîm*. Two of the *kokîm* in the semicircular passage are tunnels leading to two inner chambers, one having two *kokîm*, of which one is unfinished

A rude *graffita* from this tomb in Greek and Hebrew is given by De Vogué ('Temple de Jerusalem,' Plate XXXVIII., fig. 2) It reads thus :

φλωριΛΝος ΔΙΤΑΙΟΣ ---- שלום עב

The first Hebrew word is שלום This *graffita* may be compared with the rude inscriptions on the osteophagi described by Dr Chaplin in

1873, and by M. Clermont Ganneau in 1874 M Ganneau found some other fragments of Greek Christian *graffite* in the Tombs of the Prophets in 1871. (See 'Quarterly Statement,' 1871, p. 102) The tombs thus appear to have been possibly re-used.

The character of the Hebrew, which resembles that used by Jewish pilgrims, together with the form of some of the Greek letters, shows these *graffite* to be very late

There can be little doubt that these tombs are Jewish, although the arrangement is unusual. Some circular chambers, with radiating *kokîm* have, however, been found during the survey in the western plains (See 'Memoirs,' Vol II, p 52, etc) The Jews hold these so-called Tombs of the Prophets in great veneration There are many other tombs scattered over the sides of the mountain, all apparently Jewish, and the principal Jewish cemetery is on the slope of Olivet, opposite the Haram Enclosure. Further south, on Jebel Sonneik (the so-called Mount of Offence), a number of osteophagi, with rude Hebrew inscriptions, were found in 1873 Similar osteophagi are mentioned in the Talmud; and by Benjamin of Tudela (twelfth century) they are noticed as occurring in the Cave at Hebron. They are not large enough to contain a whole body, but the Jews used them for the bones of their ancestors, which they collected and brought (often from Spain and other distant countries) for sepulture at Jerusalem This practice is connected with well-known superstitions, and with the belief that the Last Judgment would take place in the Kedron valley

NOTE.—M Clermont Ganneau has published a collection of 52 of these inscriptions from osteophagi ('Révue Archéologique,' May-June, 1883) The character of the Hebrew and of the Greek alike seems to indicate a date perhaps not earlier than the fourth century A D for these texts, which agrees historically with the fact that the Jews excluded from Jerusalem by Hadrian were first permitted to return to the city by Constantine. The inscriptions contain common Jewish names, and in some cases seem to be Christian

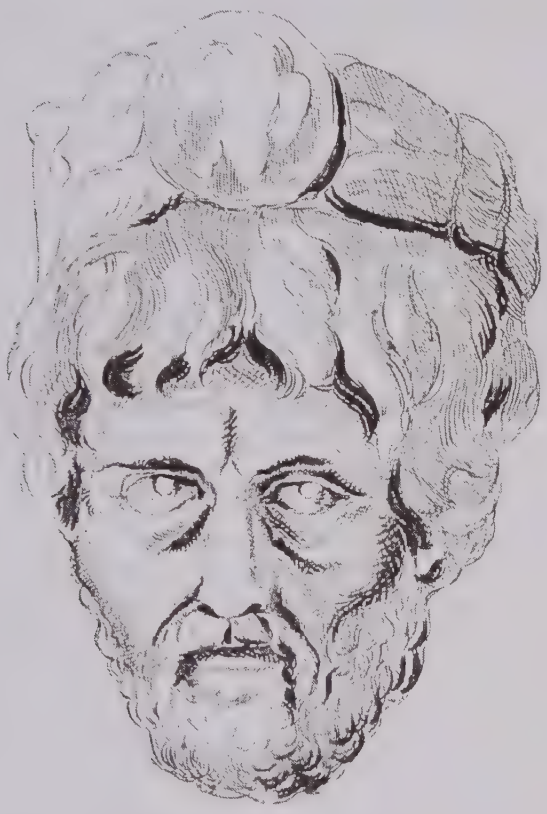
Visited 9th February, 1874

Kabûr es Salatîn ('Tombs of the Sultans')

Is the ordinary native name of the fine monument commonly known as Tombs of the Kings The modern Jews call it the Tomb of Kalba Shebuya, a somewhat mythical rich man (Tal Bab Gittin 56 *a*), and this tradition is found also in Jewish Itineraries. There can, however, be little doubt that Robinson's identification of the monument as being the Tomb of Helena, Queen of Adiabene (20 Ant iv 3), is correct The three pyramids mentioned in this account were still visible east of the north road in the fourth century (Eusebius, 'Hist Eccles.' ii 12, Jerome on the journey of Sta Paula), and the rolling stone at the door, described by Pausanias in the second century A D. ('Græcia Descript.' viii. 16), is still visible Portions of pyramidal structures over the façade have been found in recent excavation, and they appear to have resembled the pyramid over the so-called Tomb of Zechariah in the Kedron valley.

The tomb is entered by a low door at the west end of the rock-cut porch, which had formerly two rock pillars supporting its roof. The frieze above is now much injured, but consisted of triglyphs dividing various designs The chamber to the west has still the rolling stone in front of the door, it leads to three chambers, containing *loculi* and *kokîm*, two on the west, one on the north There is a chamber with two *loculi* beneath the northern chamber, and another with three *loculi* is reached from the south-western chamber The sepulchre would contain at least forty bodies, and is an interesting and valuable transitional example between the older *kokîm* tombs and the later *loculi* tombs of the Jews Some of the arrangements of *loculi* are reproduced in the single tomb west of Jeremiah's grotto (the possible site of the Holy Sepulchre), and the date which must be ascribed to such tombs appears to include the century before Christ. (Cf Sheet V, Section B., Sheikh Abreik) In one of the lower chambers of the Tomb of Helena (or Kabûr es Salatân) was found by De Saulcy a sarcophagus, with an Aramaic inscription of two lines with eight letters in each, roughly cut and approaching square Hebrew in form. (Cf. Wâdy en Nâr, Tomb of the Beni Hazir) In the first line he deciphered the words S a r a M e l e k a, 'Queen Sara.' It is not impossible that this was the native name of Queen Helena herself,

and that the body found lying in the sarcophagus was her own. The skeleton crumbled at once on the lid being raised, and only a few remains of gold thread were preserved. During this exploration, Roman coins and fibula, a Roman lamp and a little figure 1 inch high of the triple



HEAD OF HADRIAN, FOUND NEAR THE TOMBS OF THE KINGS.

Hecate, were found. All the coins were earlier than the time of Titus: urns, tear-bottles, small vases, alabaster bottles, small gold ornaments for the dress, and osteophagi were also discovered, all agreeing with the attribution of the tomb to the Roman period preceding the great siege.

The Tomb of Helena has recently been enclosed by the proprietor with a stone wall, and an admission fee is charged. This is satisfactory, as the monument was being much injured before such precautions were taken. (See Plan, Ordnance Survey, Plate XXV., and description in Sir C. Wilson's Notes, p 66)

The Tomb of Helena is the most southerly of those in the great northern cemetery The tombs of the same period extend on the north-west along the sides of the road to Neby Samwil, where the so-called Tombs of the Judges are the most remarkable There are other tombs along Wâdy el Jôz, including the Tomb of Simon the Just (already described, see Bir el Yehûdiyeh), while further north, in Wâdy es Samâr, is the tomb called Mŭghâret Umm el 'Anab (see under that head) with others. At Kŭsr el Kurmeh and Khŭrbet el Bedr are other sepulchres (as described under those heads), and the Jewish cemetery of the Herodian period appears to be represented by these sepulchres

The Tombs of the Judges have been known since the Middle Ages to the Jews, by the name still given to them by the modern Jews—Tombs of the Sanhedrin—and there is nothing impossible in such a tradition. The monument is conspicuous for its rock-carved pediment of debased style The internal arrangements are unusual. There are seven *kokîm* at ground level on the north wall of the first chamber, and over these three *arcosolia*, each with two *kokîm* at the back There are two inner chambers on the east at different levels, containing *kokîm* in two tiers, and also on the south a chamber with *kokîm* and *arcosolia* above them, this chamber being also at a different level. Similar tombs occur near this monument on the south, with *kokîm* and *loculi*, thus belonging to the transition Jewish period.

Khŭrbet el Bedr—Traces of ruins and many *kokîm* tombs.

Khŭrbet Khamîs—Traces of ruins

Khŭrbet el Khâzûk.—Traces of ruins.

Khŭrbet es Salâh—Quarried rock and a cistern. It is not impossible that this ruin may be the site of Zelah of Benjamin, the home of Saul (Joshua xviii. 28).

Kubbet el 'Abd.

(See Lieutenant Kitchener's Photograph, No 23) There is much mediæval masonry used up in this building, and the central tomb (as drawn by M le Comte) has a Gothic appearance, as well as the capitals of the doorway This monument is within the precincts of the old Carnarium Leonis, a Christian cemetery.

Kurm esh Sheikh.

In this garden there is a cemetery of rock-sunk tombs. (See 'Quarterly Statement,' April, 1874, p 95) There are about twenty tombs in all, including one cut in the counter-scarp of the city ditch outside the garden There can be little doubt from the character of these tombs, which have been described and planned by M. Clermont Ganneau, that we have here a Christian—perhaps Crusading—cemetery

Kŭsr el Kurmeh

Near this is a rock-cut tomb belonging to the cemetery which extends to the Tombs of the Judges It was excavated by the French, and has a porch about 20 feet by 8 feet, supported on two columns, the capitals of which have an almost Egyptian outline. The pilasters at the sides have a moulding in low relief, like those in the principal tomb at Tibneh (Sheet XIV, Section B) A door 2 feet wide leads in from the porch to a chamber 8 feet square, and this has on either side a chamber of equal size, and at the back a third chamber 7 feet square This last has a *loculus* on each wall, and under each *loculus* two *kokîm*, nine graves in all. This arrangement is similar somewhat to that at the Tombs of the Judges, where are two tiers of *kokîm*, the upper tier with an arched recess in front.

Visited 9th January, 1874.

Mŭghâret el 'Anab

(See Palestine Exploration Fund Photograph No. 142) This is the name of a fine tomb near Shâfât on the north side of Wâdy es Samâr. It has a porch in front, in which the rock is cut in imitation of drafted masonry. (Compare Deir ed Deîb, Sheet XI, Section B) On either side are buttresses similarly carved At the back of the porch is a frieze, with triglyphs and rosettes, having pilasters in low relief under it On the left of the entrance, below the frieze, is a recess, apparently to hold an inscribed slab, between two pilasters in low relief. There are also remains of a Greek inscription on the rock close by·

OMH

The chamber within has five *kokîm* on each wall (15 in all) The central *koka* at the back has been converted into a passage leading to an inner chamber, with two *kokîm* on each side wall, and one unfinished at the back.

The doorway has been partly destroyed, and is now rudely arched

Visited 9th January, 1874

El Muskobîyeh

This is the Russian establishment, including the Cathedral, Consulate and hospital, with a hospice for 1,000 pilgrims The buildings were commenced in 1860 and completed in 1864 In the ground west of the cathedral a fine column was found It is a monolith, 41 feet long and 6 feet in diameter, cut in rock and never finished, being still joined to the rock beneath In size it recalls the description given by Josephus of the pillars of Herod's Temple (15 Ant. xi 5)

Neby Dâûd

This is the modern name of the mosque standing over the old Christian Church of the Cœnaculum The tradition that the Kings of

Judah were buried here is first mentioned by Benjamin of Tudela, in the twelfth century John Poloner, in the fifteenth, repeats it, and on this plea the site was seized by the Moslems in 1542 A.D. The existing building consists of a chamber with a crypt beneath These are remains of the church built by the Franciscans in 1354, on the ruins of the Crusading church. The crypt is now divided into two apartments, the western being the supposed site of the 'Washing of the Feet,' the eastern containing the cenotaph called the Tomb of David, and supposed to stand over a cave in which is the real tomb The arches are pointed and the roof groined, and the crypt seems to be of Crusading date Four piers divide the crypt into two aisles, running east and west. The chamber above has also pointed arches, and a groined roof with three pointed windows on the south On the east in a sort of later addition to the building is another cenotaph, generally shown as David's Tomb This arrangement resembles the double cenotaph of Joseph at Hebron (Sheet XXI) The upper cenotaph is beneath a modern dome The western part of the upper chamber was measured by De Vogué, and found to be 14 metres by 9 metres, with two columns standing over the two western pillars of the crypt, and forming two aisles Semi-pillars engaged in the walls correspond to these columns. The whole style is Gothic, not earlier than the fourteenth century. The crypt is reached by stairs from the west end of this chapel (Cf. De Vogué, 'Églises de la Terre Sainte,' p. 322.)

The double church reproduces that described by Theodoricus and by Phocas in the twelfth century In the crypt there was then a painting (probably in fresco) of the Washing of the Disciples' Feet, with an inscription

'Christus discipulis apparuit hic Galilæis
Surgens, propterea locus est dictus Galilæus'

It is accordingly called the Galilee of Mount Sion by Sœwulf and Sir John Maundeville Opposite this fresco was one of the Death of the Virgin. In the upper church were painted the Last Supper and the Pentecostal miracle, in mosaic, in the apse

A little chapel of St. Stephen adjoined this church in the twelfth century (Phocas), where his body was placed when found at Caphar Gamala,

Beit el Jemâl (Sheet XVII.). These buildings were still standing in 1219 A.D., when visited by Willibrand of Oldenburg, but fell into ruins rather later.

The Armenian Church of the House of Caiaphas stands near Neby Dâûd, on the site of the old St Saviour. The prison of Christ at this spot is mentioned from the fourth century downwards. The site of the old chapel of Gallicantus is now only marked by a fragment of a vault. The tradition appears to be first mentioned by Bernard the Wise, in the 9th century.

Râs el Meshârif ('Hill-top of the High Places').

The name is common in Palestine. On this hill-top there are numerous piles of little stones, about a foot high, called Meshâhed ('monuments'), and erected here, as in other cases, because from this brow first the pilgrim along the north road obtains a view of the city. Thus the site answers exactly to that of Scopus (see 'Quarterly Statement,' April, 1874, p. 111), and the name has a meaning similar to that of the Greek Σκοπος, which was 7 furlongs from Jerusalem (B.J., v. 2, 3), or just the distance required. This place is supposed to be the same as Sapha, noticed in Ant. xi. 8, 5, meaning Σκοπος, according to Josephus.

Rujm el Kahakîr.—The position of these curious stone-heaps leads to the supposition that they may be remains of one of Titus's camps against Jerusalem. We know that at Masada (Sheet XXVI.) the Roman camps had drystone walls. The heaps were carefully examined in the winter of 1881-82 with this view, but no distinct plan could be traced, although ruined walls certainly exist among the heaps.

Rŭjûm el Behîmeh.—These are heaps of black flints, collected from the surrounding country. The word may come from Buhmah, 'a solid rock,' or 'hard stone' (Lane's Lexicon), but it means literally 'Cairns of the Beast' (Hebrew Behemoth). It is probably to this place that Marino Sanuto refers, in placing the Stone of Bohan near Bahurim, and on the north part of Olivet (Gesta Dei, Map of Mar. San., Book III., Part XIV., chap. iii.). The Arabic word, Ibhâm, 'thumb,' comes from the same root, and is equivalent to the Hebrew Bohan, 'thumb.'

The rock on this ridge is throughout interstratified with bands of flint, notably beneath the Râs el Meshârif Fragments of this flint are scattered over the surface, and have been collected in these cairns to clear the ground for ploughing They show no signs of being artificially worked.

Silwân.

The modern village of Siloam, on the east side of Wâdy en Nâr On the wall of a house in the village the following inscription was found in 1872, apparently an old tombstone The letters have in some cases uncial forms, and the text is probably of Byzantine origin.

- - - NIM
- - ENEO
NOΣNEOY
KLIOYEN
AYTΩNO - -
- - OMI - - -
AIAKIAIITO

The houses of the village are built against rude caves, but nothing was found in these when explored in 1872

Immediately north of the village is the small plateau above the monolithic tomb (Ordnance Survey Notes, Plate XXIV fig 4) which tomb is now French property The scarp is 20 feet high, with a chamber cut in it Close to the cistern marked on the Ordnance Survey on the plateau, the rock is covered with cement and painted in fresco. Two panels were visible On one is an arabesque pattern in dull colours, red on a green ground, on the other are letters, white on a bluish green ground The inscription is close to the ground, so that there is probably an accumulation of rubbish here This inscription is remarkable, because it is written in vertical instead of horizontal lines, an arrangement which, taken in connection with the forms of the characters (approaching the Jacobite or Estanghelo letters), indicates that it is a Syriac text of probably the sixth century A D It is, however, too much damaged to be read, but may have been the title of a fresco picture Probably an old Syrian or Melchite chapel here existed

In the village of Silwân M Clermont Ganneau discovered a Phœnician inscription, with the words Beth Baal. ('Quarterly Statement,' 1871, p. 103) It has never been published

Wâdy en Nâr ('The Fire Valley')

The general Arab name of the Kedron valley Under this name may be noticed the ancient tombs on the east side of the valley, including the so-called Absolom's Pillar, the tombs of St. James and Zechariah, the monolith generally known as the Egyptian Tomb, and the tombs beneath the village of Silwân

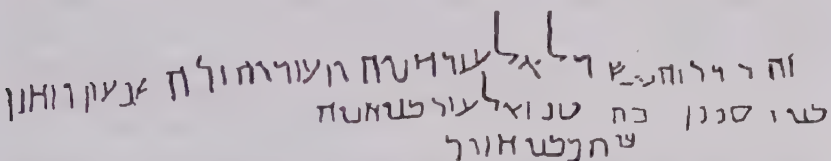
Absolom's Pillar, called by the natives the Tantûr Fer'ôn, or 'Pharaoh's Peak,' is rock-cut to the height of the first cornice, the square part above and the drum, with the peculiar dome, being of masonry The order is Ionic, the frieze and architrave are Doric, with triglyphs and guttæ. The cornice is a deep and high cavetto of Egyptian appearance, with a bold torus below The monument is 20 feet square at the base outside, and 55 feet in total height above the present surface, but the pillar bases are hidden, they were excavated in 1871. The chamber within the rock-cut part is 8 feet square, with a *loculus* recess on the south, and another on the east. This monument is considered to belong to the Hasmonean period, and is possibly the tomb of Alexander Jannæus (5 Wars, vii 3) It is called Absolom's Hand by Sir John Maundeville (fourteenth century), and also by the Jewish writer of Jichus ha Aboth, in 1564 A.D. The Jews still fling stones at the tomb in memory of Absolom's rebellion. (Cf 2 Sam xviii 18) In the Byzantine Itineraries it receives various traditional names.

The rock is cut back round this monument, forming a sort of court on all sides but the west, about 20 feet high and 12 feet wide, and at the back, on the east, near the north-east angle, a broad entrance, with a rock-cut pediment above, leads to the so-called Tomb of Jehosaphat, consisting of five chambers, without either *kokîm* or *loculi*, one each side of the first, or entrance chamber, one at the back, and a fifth, which is not wider than an ordinary *koka*, on the south of the southern chamber. In this some phylacteries were found by Dr. Tobler, seeming to show

that the place was once frequented by the Jews The entrance chamber (as in one or two other tombs) was covered with plaster and painted in fresco during the period of Christian domination

South of the Tantur Fer'ôn is the Tomb of the Bene Hazir, with a rock-cut porch high up in the cliff, the rocky entablature supported by two Doric pillars, also rock-cut The porch is reached by a tunnel on the south from the court of the Tomb of Zechariah, and a shaft leads down on the north to another tunnel north of the porch The tomb within consists of a principal chamber, with doors on the other three sides leading to three inner chambers That to the north has three *kokîm*, that to the east an equal number, and an entrance to an inner chamber with steps; that to the south has three *kokîm* on its east wall, and one at the end, on the south.

The Tomb of the Bene Hazir is traditionally called the Grotto of St James, and was once supposed to be his sepulchre The Hebrew



inscription over the pillars and beneath the triglyphs of the frieze cannot, however, have been cut later than the time when the porch was excavated, being then made inaccessible It was copied by De Vogué ('Temple de Jerusalem,' p. 45) as follows

זה קבר · וה · · ר לאלעזר הניה יועזר יהודה שמעון
יוחנן בן יוסף בן · · כ · · סף ואלעזר בני הניה
· · ם בני חזיר

which is rendered

'This tomb and to Eleazar, Haniah, Joazar, Jehudah, Simon, Johanan, son of Joseph, son Joseph and Eleazar, sons of Haniah of the Bene Hazir'

The Bene Hazir (1 Chron xxiv 15) were a priestly family The character of the inscription is said by De Vogué to belong to the century before Christ. The names are common Jewish names, and were borne by the late Hasmonæans and the Herodian high-priests

The importance of this inscription is very great The earliest examples of square Hebrew as yet known (excepting this text) are the Carpentras Stone and some papyri of the time of the later Ptolemies, which belong to the second and third centuries before Christ The square Hebrew text found by Mr Tyrwhitt Drake at 'Ain Sinia ('Memoirs,' vol. ii, p 302) is unfortunately undated, though very probably ancient The Bene Hazîr text should be compared with that on the sarcophagus of Queen Sara (see 'Kabûr es Salatân'), which belongs to about the year 45 A D, and with that of the synagogue at Kefr Bir'im (about 135 A D), as also with the Palmyrene texts between 48 A D and 257 A.D (one being dated 102 A.D.) The Bene Hazîr text is earlier than most of these, if it be supposed (as is most probable) that a fine Jewish tomb at Jerusalem cannot have been constructed after the great siege (70 A D), and that the text (as seems most probable from its position) is as old as the tomb. The tomb has *kokîm*, and not *loculi*, which indicates early date; and it seems improbable that the porch can have been cut later than the tomb itself. It seems, therefore, that the inscription is, perhaps, the earliest monumental text we possess in the square character, and it includes seventeen letters of the alphabet. The *Aleph* and the *Cheth* have transitional forms, and the *Zain, Yod*, and *Shin* resemble those of the Carpentras stone. It is true that Jewish coins, at least as late as 40 B C., are still inscribed with the older Phœnician letters, but, on the other hand, we have, at least, one letter of the square form as early as 176 B C. at 'Arâk el Emîr, and we know that the two alphabets existed side by side in the second century A D (Mishnah Yadaim, iv. 4).

The so-called Tomb of Zechariah, south of the last, is 16 feet square and 30 feet high, entirely rock-cut, with a pyramid and Ionic pillars between square corner pilasters. The same bold cavetto cornice, with a well-defined torus, occurs here as on Absolom's Tomb, and the same rock court on all sides but the west Hebrew names are cut on the walls, the monument being venerated by the Jews This monument is also mentioned in the Jichus ha Aboth by its present name in 1564 A D

The next important monument is the rock-cut tomb which has been enclosed by the French in a modern wall north of the village of Silwân, and south of the preceding group. This is called the Egyptian Tomb by De Vogué and others, because of its Egyptian-looking cornice, which is,

however, exactly like those of Absolom's Pillar and Zechariah's Tomb above described, while the rock walls of the monument are vertical, and not sloping, as in Egyptian pylons. This tomb was planned by Sir C. Wilson during the execution of the Ordnance Survey. It is about 18 feet square and 11 feet high externally, with a door on the north-west face 5 feet high, 2 feet 3 inches wide. The chamber within is 7 feet square and 7 feet high in the middle, with a sloping ceiling, having the ridge at right angles to the door. The tomb does not seem to have been finished, as excavations in the side walls exist, apparently the commencement of recesses or *loculi* never finished. To the left of the door, at the level of its top, two marks were noticed by M. Clermont Ganneau, which he believes to be Phœnician letters, and he supposes the door to have been heightened so as to cut away the rest of the text. The supposed letters occupy a space of 9 inches by 2 inches.

The surface of the rock is, however, so much weathered, and the letters consequently so much defaced, as to make it doubtful whether they really represent an inscription. They are remarkably long for Phœnician letters, and the character is not that of the Bene Hazir inscription, but one much earlier, while in architectural style the tomb itself appears to be not earlier than the Hasmonæan age.

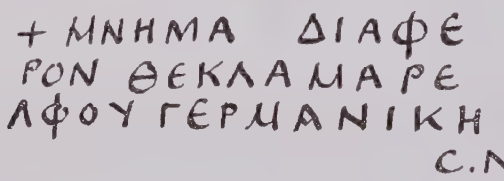
A good many small chambers are cut in the face of the cliff south of this tomb. These were all examined by Captain Conder in July, 1872. In one a pointed ceiling was found. Some have only small recesses and niches for lamps in their walls, others a single *loculus*. Crosses are cut on the walls, and these are the grottos inhabited by Christian monks in the twelfth century (John of Wirtzburg), but they were probably excavated earlier for tombs.

Wâdy Rabâbeh.

The name of the southern valley, generally supposed to be the old Valley of Hinnom. On the south side are many tombs, belonging mostly to the Christian period The following is repeated on several of these tombs:

'Of Holy Sion,'

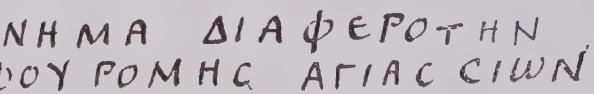
referring to the ancient Church of Sion on the hill to the north. Towards the west is the tomb which Schultz supposes to have been that of Amarulph of Germany, but De Vogué and Captain Conder, having independently studied the text, give a somewhat different reading. The tomb is close to the path leading from Sion to Abu Tôr. It is reached by steps, and contains three *loculi*, with a cave inside. The text is above the door, as follows



'The private tomb of Thecla Mar . lphos, the German Sion

De Saulcy reads 'Marulphus' for the second name.

A second tomb of interest exists further east, bearing the inscription:



'The private monument of . . . . aphos, the Roman Holy Sion'

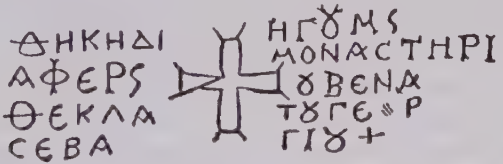
The tomb within is a rude chamber, with a *loculus* to the east, and a door broken in quarrying.

Another inscription in this group of tombs was copied by Schultz, but seems now to be destroyed, as no explorer has been able to find it since. It reads.

ΜΝΗΜΑ ΔΙΑ ΦΕΡΟΝΤΑΤΟΥΕΥΓΗ
ΝΟΣΟΝΟΜΙΟΥΤΟΥΠΑΤΡΟΣ
ΑΓΙΟΣΟΥ--

It is not certain whether this copy is correct, for in other cases Schultz's copies have been improved by later visitors

The most interesting of these texts is that of the Tomb of Thecla Augusta, written round a cross as below ·



'The private tomb of Thecla Seba (ste), Abbess of the Monastery of the Daughters (*Benat*) of (St.) George.'

This was copied by Krafft, and more perfectly by De Saulcy De Vogué improved on De Saulcy's copy, and adds a note as to the history of Thecla Sebaste (or Augusta) She was the eldest daughter of the Emperor Theophilus and of Theodora She was shut up in a convent by her brother, Michel III., and was still alive in the time of Basil the Macedonian (867—886 AD) She is represented with her brother on coins struck during the regency of her mother Theodora, with the legend 'Michael Thecla Theodora Despotna' She is known to have been called Augusta (that is, Sebaste) (See Ducange, 'Familiæ Augustæ Byzantinæ,' XVII, as quoted by De Vogué, 'Temple de Jerusalem,' p 134)

This identification is of great value, as giving an approximate date for the other tombs in the cemetery about the ninth century, when Christians were on friendly terms with the Arab Khalifs and Moslems generally.

The tomb known as the 'Retreat of the Apostles' is immediately east

of the vault of Hakk ed Dumm (see under that name) on the south side of the same valley It has a very well cut frieze over the entrance. (See Palestine Exploration Fund Photograph No. 151.) The entrance has now been built up with masonry, and an iron door put up Within is a chamber with frescoes and monograms of Christ and crosses. At the back is a larger chamber, and two others at the sides Although once used as a chapel, the tomb itself seems by its style probably to belong to the Herodian period, resembling the class of later Jewish tombs described under the heads Kabûr es Salatân and Wâdy en Nâr The position suggests that it is to this monument that Josephus refers under the name of the Sepulchre of Ananus (5 Wars xii 2), and it is remarkable that Christian tradition also points to this hill in connection with the Jewish high priests (the House of Caiaphas being at Deir Abu Tôr)

There are several other tombs in this great southern cemetery, with traces of sculpture, but the only one of interest is that near the junction of the two valleys (Kedron and Hinnom), not far from which there is a small chamber with three *kokîm* and a cross incised over the door—a clear instance of the later use of a Jewish tomb by Christians either as a hermitage or for sepulture The larger tomb has also been re-used, apparently as a chapel It has an outer porch 10 feet by 13½ feet, an inner chamber 15 feet to the back, 13½ feet across, which had originally three *kokîm* each side, and an inmost chamber with a *loculus* each side and two *kokîm* at the back A bench runs round three sides of this inmost chamber. Two of the three eastern *kokîm* of the first chamber within the porch have been broken, so as to form rude apses The roof of this chamber is carefully sculptured, with a circle having radiating grooves or scallop-shell pattern; the diameter of the circle is about 13 feet. The central *loculus* on the west has a T-headed moulding round the top, like the doorway of the small synagogue at Kefr Bir'îm (Memoirs, vol. i., p. 232). The door leading to the inmost chamber has a similar T-headed moulding, and a pediment in form resembling that at the Tombs of the Judges, but without any foliated work. The occurrence of *kokîm* and the style of ornamentation would seem to indicate that this tomb is of the Herodian age, although the Galilean synagogues belong to the second century of our era; for in the time of Hadrian the Jews were excluded from Jerusalem, and not allowed to re-inhabit it after until

the time of Constantine A fine Jewish tomb at Jerusalem cannot well therefore be dated later than 70 A.D. at latest It is quite possible that it is to this tomb, not to the one preceding, that Josephus refers as the Sepulchre of Ananus

The *loculi* and *kokîm* in this tomb are very well cut, and contrast with the rough interiors of the Christian tombs previously noted. Outside the porch are two alcoves, one having a seat running round it They are some 10 feet in diameter, and may have been intended for the accommodation of relatives visiting the tomb

This cemetery was examined by Captain Conder in the winter of 1873-74, and again in 1881-82. The inscriptions which he copied he afterwards carefully compared with the readings of Krafft, Tobler, Schultz, De Saulcy, and De Vogué. The latter appears to have been the most successful in reading them, though one or two improvements on his copy are given in the preceding copies

On the north side of Wâdy Rabâbeh, near the bend from Birket es Sultân, is a masonry tomb, close to a tree near the bottom It is entirely lined with rubble, and has a rock-cut entrance. The rock shows in the roof at the further end. It has two *loculi* each side, 6½ feet long; the central passage is 18 feet 2 inches long, 3 feet 4 inches broad. There is a recess 5 feet diameter inside, the entrance on the left. There is a *koka* at the end 6 feet 6 inches, by 2½ feet It is not in the axis of the passage, but in a line inclined to the right. The *loculi* are lined with very hard brown cement, containing fragments of pottery and small pebbles

The arches of the passage and of the *arcosolia* over the *loculi* are semicircular The *loculi* are sunk lower than the floor of the passage; they were covered with slabs The passage is about 10 feet in height (See Special Papers, p. 292)

Zahweileh.

The modern name of the cliff towards the north end of the village of Silwân on which the houses stand The name was discovered by M Clermont Ganneau, and by him identified with the stone (or rock) Zoheleth, 'which is by En Rogel' (1 Kings 1 9) The meaning

and the radical letters of the Arabic and Hebrew are the same, from a root meaning 'to slip' The identification involves that of the Virgin's Fountain with En Rogel, which is a valuable point in Jerusalem topography. It also agrees well with the identification of the same spring with Gihon (or the 'Fountain Head'), which was in the 'valley' (Nachal or Kedron Torrent, cf 2 Chron xxxii 30; xxxiii 14). Solomon was crowned apparently at En Rogel in full sight of the partisans of Adonijah, who stood on the terrace above the Cliff of Zoheleth, where the modern village of Silwân now stands. The name Zahweileh has been collected by Dr. Chaplin and Captain Conder independently on several occasions since M Ganneau pointed it out, and it is well known to the inhabitants of the village. Gesenius renders Zoheleth the 'Serpent Stone,' and in this connection should be noticed the legend of the Dragon (see 'Ain Umm ed Deraj) at the fountain opposite. This name may perhaps have some connection with the late worship of the serpent in Jerusalem (2 Kings xviii 4)

C. R. Conder, Captain, R.E.

ANCIENT INSCRIPTIONS AT JERUSALEM.

As these inscriptions are scattered through many works on the subject, it will be convenient here to enumerate them, and to give those which are not otherwise mentioned

HEBREW.

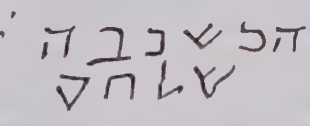
No 1. *The Siloam Inscription* is the oldest Hebrew text yet known, and the most complete, next to the Moabite Stone. (See 'Ain Silwân)

No 2 The fragment of a Phœnician inscription, found by M Clermont Ganneau at Silwân with the words 'Beth Baal' legible It is still unpublished

No 3 The painted letters at the base of the Temple wall at the south-east angle, discovered by Colonel Sir Charles Warren, and assignable either to the time of Solomon or perhaps more probably to that of Herod

No 4 The inscription on the tomb of the Bene Hazîr, supposed to belong to the century before Christ, and rudely approaching square Hebrew in form (See under head Wâdy en Nâr)

No 5. A partially effaced Hebrew inscription on the façade of a tomb south of the so-called 'Tomb of the Judges' and near the road. The form of the letters approaches the square Hebrew.



This is copied by De Vogué ('Temple de Jerusalem,' p 131) and thus rendered

המשכב ה(וה) - - - -
של חס

The first word is the same which is used on the sarcophagus of Eshmunazar to signify 'tomb' To this list must be added the numerous rude Hebrew names scrawled on osteophagi found on the Mount of Olives, but these do not appear to be of great antiquity, for reasons already

given (See under head Jebel et Tôr) Another inscription of this class on a stone of the Triple Gate is given in the Ordnance Survey Notes, Plate XI , Fig 4

No. 6. On the sarcophagus of Queen Sara (See Kabûr es Salatân)

GREEK

No 7 The famous stele of Herod's Temple, discovered by M Clermont Ganneau

'Permit me to have recourse again to the publicity of your journal in order to make known, in a few words, an important discovery which I have just made in Jerusalem It is of one of those tablets which, in the Temple reconstructed by Herod, forbade strangers, as Josephus tells, from passing the sacred enclosure—the prohibition being written in Greek and Latin. The tablet which I have found bears the following inscription in Greek in seven lines

ΜΗΘΕΝΑ ΑΛΛΟΓΕΝΗ ΕΙΣΠΟ
ΡΕΥΕΣΘΑΙ ΕΝΤΟΣ ΤΟΥ ΠΕ
ΡΙ ΤΟ ΙΕΡΟΝ ΤΡΥΦΑΚΤΟΥ ΚΑΙ
ΠΕΡΙΒΟΛΟΥ ΟΣΔ'ΑΝ ΛΗ
ΦΘΗ ΕΑΥΤΩΙ ΑΙΤΙΟΣ ΕΣ
ΤΑΙ ΔΙΑ ΤΟ ΕΞΑΚΟΛΟΥ
ΘΕΙΝ ΘΑΝΑΤΟΝ.

'The characters are monumental in size, and present the appearance which one would expect in an inscription of the period

'The translation is .

'"No stranger is to enter within the balustrade (*τρυφακτος*) round the Temple and enclosure. Whoever is caught will be responsible to himself for his death, which will ensue"

'The passage of Josephus to which I have made allusion is as follows .

'"When you go through these first cloisters unto the second (court of the seven temples), there was a partition (*ὀρυφακτος*) made of stone all round, whose height was three cubits , its construction was very elegant Upon it stood pillars at equal distances from one another, declaring the laws of purity, some in Greek, and some in Roman letters, that no 'foreigner should go within that sanctuary'" (Whiston's translation)

'The connection between this text and our inscription is striking The expressions and the forms are similar *μηδενα 'αλλόφυλον* is the exact equivalent of our *μηδένα αλλογενῆ*, "the second *ἱερον*," says Josephus, "is surrounded by the *δρύφακτος*" Our inscription says "the *τρύφακτος* which is round the *ἱερον*." The variant *τρύφακτος* is singular, and probably points to one of the faults of pronunciation in use among the Jews speaking Greek at this period We must observe that Josephus does not speak of the tragic fate which menaced him who might violate the rule , his silence is certainly intentional

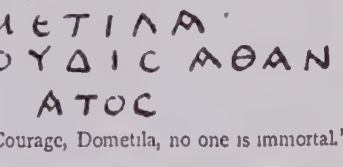
'We may boldly affirm that this Greek inscription is not only the most ancient, but also the most interesting, in all its bearings, which Jerusalem has yet produced I cannot in this simple letter follow out all the questions which it raises , that must be the object of a special memoir. I will confine myself only to remark the principal points which attach to it the fixing of a certain palæographic scale for Greek inscriptions already discovered, or

yet to be discovered in Jerusalem, the form and dimensions of the tablet, which may determine the use of the three cubit balustrade which it surmounted, appearance and workmanship of the stone, permitting us to specify technically the blocks of Herodian work, and to distinguish them from those cut at a previous date, striking confirmations of the exactness of Josephus's descriptions, authentic and contemporaneous definitions of the different parts of the Temple, the τρύφακτος (*soreg* of the Talmud?), the ἱερόν, the περίβολη, etc, etc

'The episode in the Acts of the Apostles (xxi 26, *et seq*) throws on, as well as receives from, this precious inscription great light. Paul, after purification, presents himself in the Temple, the people immediately rise against him, because certain Jews of Asia believed that Paul had introduced into the Temple a Gentile, Trophimus of Ephesus, and had thus polluted the sacred place They are about to put him to death when the Tribune commanding at Fort Antonia intervenes and rescues him from the hands of his executioners The people demand of the Tribune the execution of the culprit, *i.e.*, "the application of the law"'—Clermont-Ganneau, 'Quarterly Statement,' 1871, p 132

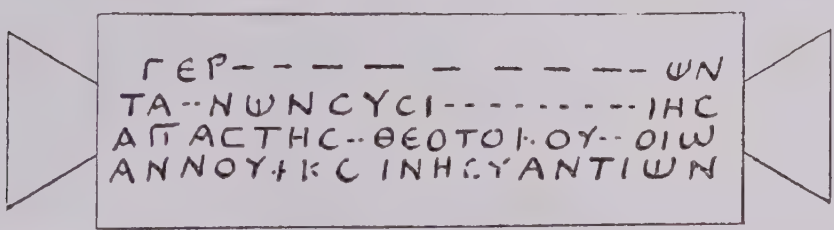
M de Saulcy is said to have discovered in the drain beneath the Triple Gate an inscription which he believes to be the Hebrew version of this stele (See 'Voyage en Terre Sainte,' vol ii, pp 12, 13) He read the words, 'Here let every man . keep silence' The letters were deeply and regularly cut on a stele similar to that of the Greek version

No 8 A Greek inscription found by De Saulcy in the Cave of St Pelagia on Olivet It is now covered over with mortar:



'Courage, Dometila, no one is immortal.'

No 9 On the north wall of the city, on a tower in which is the Bab ez Zahreh. The slab is built in upside down on the north face of the tower near the top It has the usual wings or handles, and measures 3 feet by 1 foot The text was copied as follows in May, 1881, by Captain Conder



The second and third lines contain the words 'Of the Holy Mother of God, of Holy John,' and the stone with its tablet has evidently been stolen from the ruins of some Byzantine church

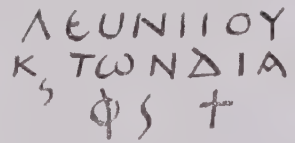
Nos. 10, 11, 12, 13, 14. The Christian Greek inscriptions in Wâdy Rabâbeh, which are specially noticed under that head.

No. 15. The slab found in the ancient tomb west of Jeremiah's grotto with a cross and the words:

ΘΗΚΗ ΔΙΑΦΕΡΟΥΣ

'The private sepulchre.'

No. 16. A slab, found by De Vogüé over the mouth of a cistern on the west slope of the Kedron valley, evidently funerary. ('Temple de Jerusalem,' Plate XXXVII., Fig. 6.)

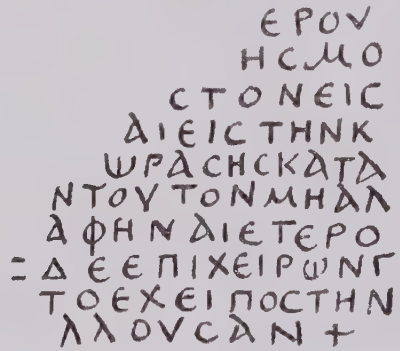


'Of Leontius and of his family.'

No. 17. A fragment of sarcophagus, with the usual cross in a circle, with trefoils between the arms of the cross, and the inscription:

This fragment is built in in the wall of a house near the corner of the Hâret Bâb es Silsileh, in the Hâret el Wâd.

No. 18. A funerary slab in the floor of the Church of the Virgin's Tomb. It forbids any other body to be placed in the tomb, and speaks of the last judgment. Similar inscriptions in Latin are frequent in the Middle Ages. It is thus copied by De Vogüé:

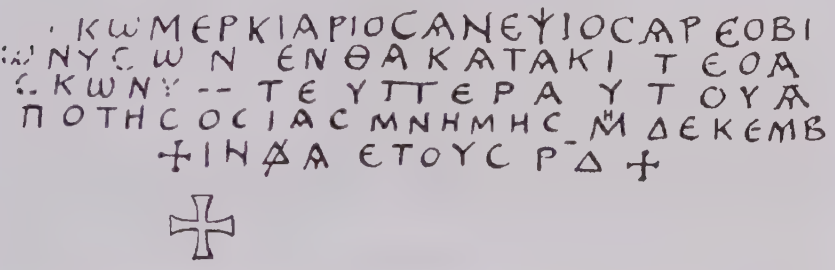


No 19 A slab, evidently one side of a sarcophagus, built into the inner marble casing of the outer wall of the Dome of the Rock, with a well designed wreath with streamers (De Vogué, 'Temple de Jerusalem,' Plate XXXVII, Fig 7), bears the Greek words

ΥΠΕΡ ϹΩΤΗΡΙΑϹ ΜΑΡΙΑϹ

This is interesting, as applying a heathen salutation ('Pro Salute') to the Virgin It is supposed to belong to the fourth century

No 20 A flagstone inside the Dome of the Rock, laid face down, and removed in 1874 It was copied by Captain Conder, and studied by M Clermont Ganneau on the spot:



M Ganneau's translation was as follows 'Commerciarius, relative of Ariobi (ndus) - - of the - - hes here the - - Pray for him - - of holy memory - - in the month of December - - Indiction 1, year 104' Commerciarius was an official Byzantine title. Ariobindus is the name of a family in the time of Justinian.

No 21 Found among the voussoirs of the Ecce Homo Arch, built in

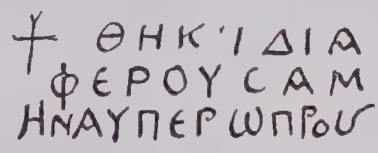
ϹΑΛ Ν
ΦΟΙ

No 22 On another stone of the same

ΑΥΡ

Both these seem to be stones taken from some earlier building

No 23 Copied by Captain Conder in 1874, on the bottom stone of a pier in the Muristan.



This is also evidently funerary

No 24 Found near the Damascus Gate

ΞΙΜΩ
ΝΑΥΤ
ΕΡΟΙ

Thus copied by M Clermont Ganneau

No 25 East Wall of Jerusalem, south of St Stephen's Gate, as copied by M. Clermont Ganneau

ΕΚΟΙΙ
ΥΠΑΤ
ΟΥΙΜ
+ ΠΙΟC

This also is funerary

No 26 Two or three almost indistinguishable letters on a slab on the interior of the same wall—the west face of the west wall of the Gate House

No 27 The inscription in the chapel north of the Asnerie (See under head 'El Heidhemiyeh.')

No 28, Greek text at Silwân (See under that head, copied by Captain Conder)

LATIN

No 29 The inscription once at the base of a statue of Hadrian, now built in, upside down, into the Haram wall, as visible from the south, just east of the Double Gate

TITO AEL HADRIANO
ANTONINO AVG PIO
PP PONTIF AVGVR
D . D

'To Titus Ælius Hadrianus Antoninus Augustus Pius, Father of his Country, Pontif Augur, by decree of the Decurions'

No 30 *Roman Inscription.*—'This text is the second which has been found up to the present date, belonging to the Roman occupation of Jerusalem—the first being the votive inscription of Antoninus, built into the southern wall of the Haram It came to light in the demolition of an old building, unfortunately it is incomplete We read only the following

LEG X FR
LIUS SABINUS
NA PRINCEPS
VSDEM · D D

It is a dedication made by a *centurio princeps* of the Tenth Legion (fretensis), named (Ju?)lius Sabinus, to another officer, probably superior in grade, belonging to the same legion, whose name is wanting The interest of the text depends principally on the fact that the

Tenth Legion formed part of the army which besieged the city under Titus We know, from Josephus, that this same legion had been left as a garrison of the conquered city, probably it continued there under Hadrian and his successors The form of the letters would seem to fix the time of the inscription to about the reign of Caracalla.'—M. Clermont Ganneau, 'Quarterly Statement,' 1871, p 103

No 31 Mediæval tombstone of a knight, in good Gothic characters 'Hic Jacet Johs de Valencinis' (See under head 'Hummâm Tûbarîya)

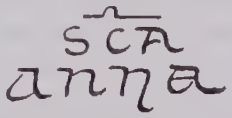
No 32 Gothic tombstone of Philip d'Aubigny, close to the threshold of the south entrance of the Holy Sepulchre Church

No 33 Gothic tombstone, now the step of a staircase in an Arab house near the Damascus Gate Copied by M Clermont Ganneau.

ETIO
DELA
FRATER
AROCH
SANIM
SC . . I

There are also a great many *graffiti* on the pillars of the south entrance to the Holy Sepulchre Church Among them Captain Conder copied two with dates—viz, 'Piero Vendam, 1384,' and 'Anton Pico, 1636'

No 34 Pointed out in 1881 by Dr Chaplin to Captain Conder, in the bazaar east of the Muristan



Probably indicates that the shops here (which are of Mediæval date) belonged to the property of the Church of St Anne

Nos 35, 36, 37, 38, 39, 40 Inscriptions in mosaic in the Church of the Holy Sepulchre, belonging to pictures (See De Vogue, 'Eglises de la Terre Sainte,' Plate XI, p 198) They are only interesting epigraphically

No 41 A similar text ('Églises de la Terre Sainte,' p 216)

No 42 The names of the months round the great north doorway of the Muristan

The Arabic inscriptions and other important Moslem texts have been mentioned in the paper on the 'Architectural History of Jerusalem' The most important are the great Kufic inscription in the Dome of the Rock, dated 72 A H, and the Karmatic inscription in the same, dated 413 A H The latter is figured by De Vogue ('Temple de Jerusalem,' Plate XXXVII, Fig 9)

THE HOLY SEPULCHRE

THE most interesting question connected with the topography of Jerusalem is that of the true site of the sepulchre of Joseph of Arimathæa in which Christ was laid, and of the place called Golgotha or Calvary, where He was crucified, and which was 'nigh at hand' to the sepulchre

The indications of position contained in the Gospels are very slight The two sites of Golgotha and the Sepulchre were near each other (John xix. 42) The place of Crucifixion was 'nigh to the city' (John xix. 20), and we learn from the Epistle to the Hebrews that Jesus 'suffered without the gate' (Heb xiii 12) There is nothing, however, further to show which side of Jerusalem these sites should be placed

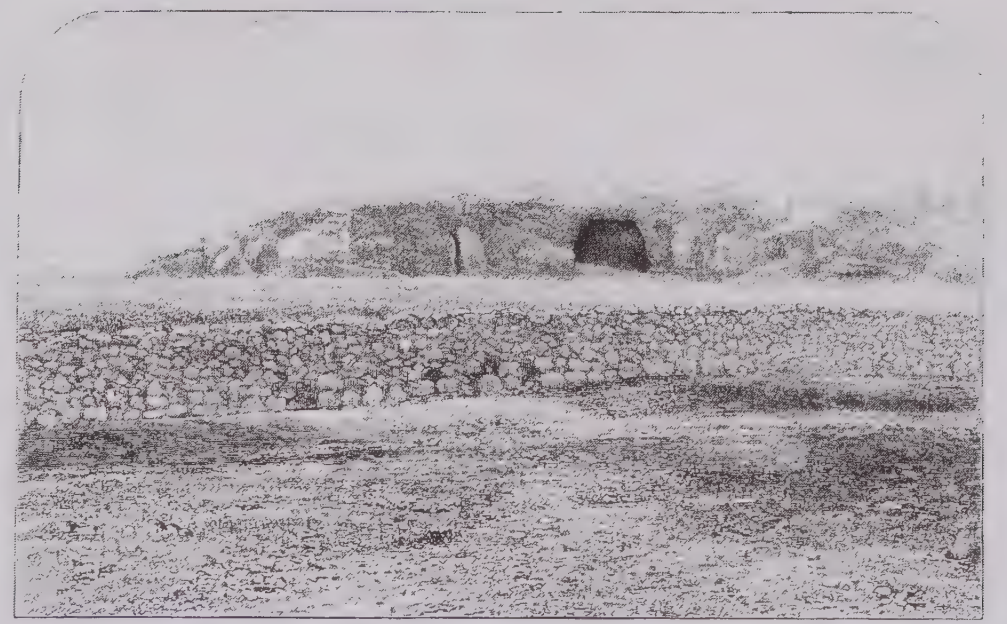
It may reasonably, however, be supposed that Golgotha ('the Skull') was the ordinary place of execution for criminals, which is mentioned in the Mishnah under the name Beth has Sekilah—the 'House of Stoning', for there is no reason to think that the Roman Procurator would have made use of a different place of execution to that established by the Jewish Sanhedrin, although that assembly had been debarred by the Romans from the power of inflicting capital punishment only a little before the date of the Crucifixion This ancient Jewish place of execution is mentioned as follows in the Mishnah (or text of the Talmud) about 150 A.D.

'When the judgment was finished they brought him forth to stone him. The place of stoning (Beth has Sekilah) was outside the Judgment Hall, as it is said, "Bring him forth that hath cursed" (Levit. xxiv. 14) One stood at the door of the Judgment Hall with a scarf in his hand,

and another man rode a horse far off from him, but so that he could see him If any said, "I have somewhat to say for his defence," this one waved his scarf, and the other galloped his horse and stopped the accused, and even if he himself said, "I have somewhat to tell in my defence," they brought him back as many as four or five times, only there must be substance in his words If they found him clear they set him free, but if not, they took him forth to stone him . . The Place of Stoning was the height of two men One of the witnesses threw him down on his loins—if he died with that thrust it was finished, but if not the second witness took a stone and cast it on his breast. If he died with that blow, the stoning was finished, but if not he was stoned by all Israel" (Sanhed vi 1-4)

From this somewhat crabbed description, several interesting conclusions have been drawn by commentators The passage quoted from Leviticus (xxiv 14), together with the arrangement for communicating by a signalman and a mounted man between the judges and the condemned, clearly shows that the place of execution was outside the city, and at some distance from the Judgment Hall It is also understood that a cliff some 12 feet high existed at the place of execution, over which the condemned was thrown by the first witness If he was not killed by the fall, the second witness cast down a stone on him, and the crowd on the cliff or beneath stood ready to complete the barbarous execution. It should be noted that the other methods of execution detailed in the tract Sanhedrin are equally barbarous, and also that it appears to have been the custom to hang on a tree or a cross the bodies of those who were stoned 'They sunk the beam in the ground and a cross-beam extended from it, and they bound his hands one over the other, and hung him up' (Sanhed vi 4). The body was, however, removed at sundown, according to the negative command (Deut xxi. 23) Thus the 'House of Stoning' was also a recognised place of crucifixion

A tradition is current amongst the Jews of Jerusalem which places this 'House of Stoning' at the present knoll north of the Damascus Gate, in which is a cave known since the fifteenth century as the 'Grotto of Jeremiah,' with a cliff the maximum height of which is about 50 feet, facing southwards towards the city This tradition was first collected by Dr Chaplin, and I afterwards twice obtained it independently from



JEREMIAH'S GROTTO FROM THE SOUTH-EAST.

separate individuals, both being Spanish Jews, and thus belonging to the oldest community of Jews in the city.

This tradition is of course not in accord with that of the Christians, but it has several points in its favour. 1st The site is outside ancient Jerusalem as restored by the latest authorities, the Third Wall coinciding east of the Damascus Gate with the present wall of the city 2nd The existence of an ancient Jewish tomb immediately to the west of the knoll, and of another possibly Jewish a little further south, would seem to indicate that the ancient city did not extend so far as to include the vicinity of the knoll for we learn from the Talmud (Baba Bathra ii 9, Tosiphta Baba Bathra i, cf Yoma iii. 3) that all tombs were at least 50 cubits outside the walls, saving those of David and Huldah. 3rd A Christian tradition as early as the fifth century also pointed to the vicinity of this site as the place of the stoning of Stephen the protomartyr. 4th The vicinity has apparently been always considered unlucky. In the fifteenth century we find Mejr ed Din speaking of the tract immediately east of the knoll under the name es Sahrah, 'the desert,' and pronouncing it to be accursed and haunted, so that the traveller should not pass it at night. This idea is no doubt connected with that of fixing the Valley of Judgment (or Jehosaphat) in the Kedron, which is still called by the Arabs Wâdy Jehennum—the Valley of Hell—an identification which is not supported by any very clear reference in the Bible, although the tradition is ancient, and common to Jew, Christian, and Moslem (cf Joel iii 12) The valley passes not far east of the knoll, and has its head north of it, where the name Jehosaphat probably still survives in the Arabic name of the village of Shâfat. The name of the knoll, according to Mejr ed Din, was el Heidemîneh or el Heidemîyeh, and the latter is still the name given to the place by Moslems It would mean 'broken' or 'destroyed,' perhaps on account of the cliff, the Moslems, however, consider that it is a corruption of Heirmîyeh, in which case it is derived from the traditional Christian name of Jeremiah's Grotto.

The site is one well fitted for a place of public execution. The top of the knoll is 2,550 feet above the sea, or 110 above the top of the Sakhrah rock in the Haram It commands a view over the city walls to the Temple enclosure and the Holy Sepulchre Church A sort of

amphitheatre is formed by the gentle slopes on the west, and the whole population of the city might easily witness from the vicinity anything taking place on the top of the cliff. The knoll is just beside the main north road. It is occupied by a cemetery of Moslem tombs, which existed as early as the fifteenth century at least, and the modern slaughter-house of Jerusalem is on the north slope. The hill is quite bare, with scanty grass covering the rocky soil, and a few irises and wild flowers growing among the graves. Not a tree or shrub exists on it, though fine olive-groves stretch northward from its vicinity. A few hungry dogs are generally prowling about, and an evil odour from the slaughter-house always offends the senses in climbing the slope. The hillock is rounded on all sides but the south, where the yellow cliff is pierced by two small caves high up in the sides. Some of the Jews appear to consider that the Beth has Sekilah was actually *in* one of these caves, which would accord better with the height of the cliff as mentioned in the Mishnah. Visitors of late years have sometimes thought that the hill with its caves resembles a skull with eye-sockets, but this is, perhaps, rather a fanciful idea, and the best evidence lies in the Jewish tradition.

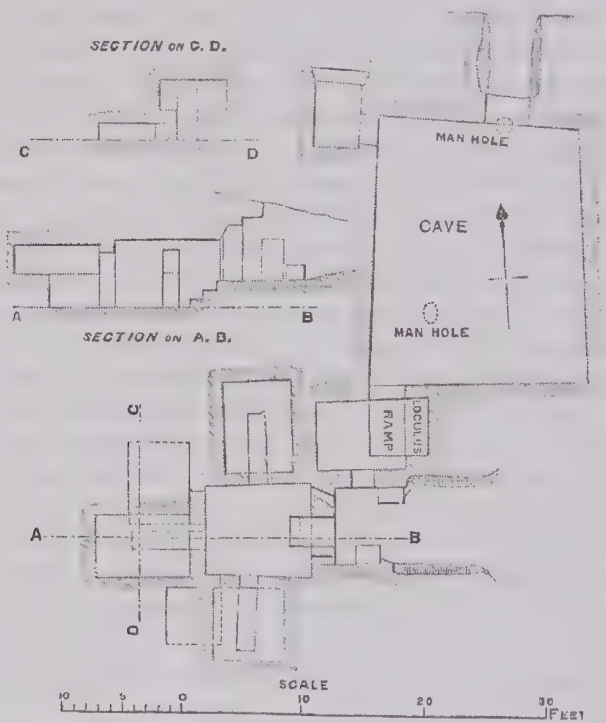
The proposal of identifying this hill with Calvary was first published in 'Tent Work in Palestine', but in 1881 it was found that a Jewish tomb existed on a smaller knoll west of the north road, about 200 yards from the top of the first-mentioned knoll. It was apparently laid bare during building operations in the vicinity, and had not been previously described. This discovery led to the suggestion that the tomb thus standing alone might be the actual sepulchre of Joseph of Arimathea, and the idea excited considerable interest in England at the time.

The following is the description of the tomb in question, sent home in 1881:

'It is cut in the east face of a very curious rock platform measuring about 70 paces either way—as shown on the Ordnance Survey about 200 yards west of Jeremiah's Grotto. The platform is roughly scarped on all sides, in an apparently artificial manner, and on the west is a higher piece of rock, also with sides rudely scarped. The rest of the space is fairly level, but there seem to be traces of the foundations of a surrounding wall in some low mounds near the edge of the platform. I have long been aware of the existence of a curious cistern in the north-east corner of this scarp. It has a domed roof with a man hole, and also a door with a passage 10 feet long and 3 feet wide, leading out eastwards. The cistern is about 8 paces

in diameter, and three steps lead down from the door to the level of the cistern floor. This excavation seems originally to have been a chamber afterwards converted into a cistern, and there are sockets for the door-hinges and for bolts in the passage entrance.

'The ancient tomb is some 30 paces further south, and the entrance is also from the east. The whole is very rudely cut in rock, which is of inferior quality. The doorway is much broken, and there is a loophole or window, 4 feet wide, either side of the door. The outer court, cut in the rock, is 7 feet square, and two stones are so placed in this as to give the idea that they may have held in place a rolling-stone before the door. On the right (or north)



is a side entrance, leading into a chamber with a single *loculus*, and thence into a cave, some 8 paces square and 10 feet high, with a well-mouth in the roof.

'The chamber within the tomb entrance is reached by a descent of two steps, and measures 6 feet by 9 feet. From either side wall, and from the back wall, is an entrance 20 inches wide and about 5½ feet high, leading into a side chamber. A passage runs in continuation of each entrance for 4½ feet, and on each side is a bench about 2½ feet wide and 2½ feet high. A similar bench occurs at the end, the whole width of each chamber being thus 5½ feet, its length 7 feet 2 inches, and its height from 5 to 6 feet. Each would contain two bodies lying

beside the passage, but there would scarcely be room for three In addition to these three chambers, there are two excavations on the floor-level, in the further corner of the central chamber They are about 5 feet square, with narrow entrances, and were scattered with human bones at the time of my visit.

'The discovery of this tomb is of no little importance in connection with Jerusalem topography If it be compared with the great cemetery at Sheikh Ibreik (Sheet V), and with the monument of Helena at Jerusalem, it will be seen to belong to the later Jewish period—the centuries immediately preceding the Christian era It is not a Christian tomb, so far as can be judged, for the Christians in Palestine seem mainly to have used the "rock-sunk" tomb A cemetery of tombs of the form commonly used by the Crusaders, was found in 1873 near the north-east angle of the Jerusalem city walls, but no Jewish tomb has ever been found before so close to the ramparts of the modern city on the north

'It would be bold to hazard the suggestion that the single Jewish sepulchre thus found is indeed the tomb in the garden, nigh unto the place called Golgotha, which belonged to the rich Joseph of Arimathea, yet its appearance so near the old place of execution, and so far from the other tombs in the old cemeteries of the city, is extremely remarkable I am sorry to say that a group of Jewish houses is growing up round the spot The rock is being blasted for building-stone, and the tomb, unless preserved, may perhaps soon be entirely destroyed It is now in a disgusting condition of filth, which shows that the Oriental Jews have little reverence for the old sepulchres of their ancestors Perhaps some of our readers might feel willing to redeem this most interesting monument from its present state of desecration, and to purchase and enclose the little plot of rocky ground in which it stands Without such preservation the sepulchre is doomed to destruction sooner or later

'The platform of rock in which the tomb is cut seems possibly to have been the base of a group of towers with a scarped foundation

'The distance from the monument of Helena, and the position with respect to the Cotton Grotto, agrees with the description given by Josephus (5 Wars II. 2) of the position of the "Women's Towers" (*see* "Conder's Handbook to the Bible," p 352). If the third wall actually extended over this line, it is easy to explain why no other tombs of the same period exist so close to the present city The extension of the fortifications rendered it necessary to remove the cemetery further off, since the Jews did not allow sepulture within the walls The cisterns may have belonged to the period when the great towers were here erected, and the passage with steps may even have been a postern from the towers.

'If we could feel any reasonable certitude that in this single Jewish tomb (dating about the time of Christ) we have recovered the actual sepulchre in which He lay, an easy explanation of the loss of the site is afforded at once, for the construction, some ten years later, of the "Women's Towers" by Agrippa, upon the rock over the tomb, would have caused the monument to be hidden beneath, or within the new buildings, and thus the sepulchre could no longer be visited, and in course of time its existence was forgotten, until the zealous Helena destroyed the Venus Temple on the present site of the Holy Sepulchre Church, and "beyond all hope" (as Eusebius words it) discovered the rock-cut Jewish tomb, which the faithful accepted as the tomb of Christ

'A careful plan of the site and of the tomb was made by Lieutenant Mantell, as the alterations in this part of Jerusalem are proceeding so rapidly, that on our next visit rock and tomb might alike have disappeared'

This tomb has since been visited by their Royal Highnesses Prince Edward and Prince George of Wales, and by many travellers, to one of whom we owe an excellent photograph of the entrance I am also informed by Herr Schick that a slab of stone was found lying in the tomb when it was excavated, with a cross and Greek inscription The slab measured 3 feet 11 inches in length, by 2 feet 7 inches in breadth The lettering is $2\frac{1}{2}$ inches high, the top line being 6 inches from the top of the slab. The inscription runs thus

ΘΗΚΗ ΔΙΑΦΕΡΟΥΣ

'Private Sepulchre'

This is evidently a funerary tablet of the fifth or sixth century at earliest, and has no necessary connection with the original tomb.

As regards the door of the tomb in question, it is doubtful whether it was intended to be closed by a rolling stone, or by some other means, but it is also doubtful whether the expressions in the Gospel refer to a rolling cylindrical stone door, or merely to the temporary closing of a new, and perhaps half-finished, tomb by a large rough mass of stone as generally depicted Sepulchres are often so closed in Palestine at the present time, and when an old tomb-door is thus stopped by stones it generally shows that bodies have recently been buried there by the Fellahin

C. R. C.

APPENDIX.

THE PLAIN OF PHILISTIA (PLATE XLVIII)

'It is no idle dream to suppose that Palestine might, in a few years, become a land flowing with milk and honey, even with the present inhabitants, under an upright Government, the land would in a short time change its appearance, and, as it is, the country has changed in parts to a small extent, due to the alteration in the Government, brought about by the influence of public opinion of the West asserting itself even in Syria. Look how those villages have begun to thrive which have been mortgaged to the Greek converts, and watch the cloud resting over the Christian village of Beit Jala in the autumn sun, with its groves of olives, while all around is the brazen sky.

'At present, however, Palestine—Philistia in particular—has not a tithe of the population that it would support, its fruit trees are left to take care of themselves, its waters allowed to run underground instead of on the surface

'Philistia consists of an undulating plain from 50 to 300 feet above the level of the sea, reaching 32 miles from Ekron to Gaza, with a breadth of from 9 to 16 miles To the east of this the hills commence, not the hill country, but a series of low spurs and undulating ground, culminating in hogs' backs running nearly north and south, and rising in places to 1,200 feet above the ocean, to the east of these there is a steep descent of 500 feet or so to valleys which break through the barriers much in the same manner as we find the rivers forming passes through the chalk hills between Aldershot and Chatham To the east of these again the hill country commences, and in 2 or 3 miles we rise to altitudes of 1,700 to 2,000 feet—the backbone of the country being at an elevation of 2,400 to 3,000 feet

'In the hill country the spurs, not more than one mile or so apart, are often separated by narrow ravines 1,500 to 2,000 feet deep, at the bottom of which in the rainy season rapid torrents roll Follow them into the plain and see what becomes of them, but first look at the existing maps In one they appear to traverse the plains in a different direction to what they do in the next The fact is, the bulk of the water reaches the ocean underground, on coming into the plain it forms marshes and pools, and quietly sinks away, while the bed of the

THE MOUTH OF JEREMIAH'S GROTTO.

stream itself in the plain is merely a narrow ditch some 6 feet wide and 4 feet deep You may leave the water at the commencement of the wâdy mouth, ride over the plain without seeing anything of it, and meet it again welling out of the ground close to the seashore, forming wide lagoons there Now, if proper precautions were taken, were the people industrious, and the country cultivated and clothed again with trees, the waters, flowing in the ravines, might be conducted over the plains in the early summer months, and induce the rich soil to yield a second crop

'The encroachment of sand is one of the most serious evils now to be dreaded on the coast of Palestine. Already Gaza and Ashdod are threatened, and nothing is done to arrest the enemy, though there is little doubt but that the danger might be averted by obliging the landed proprietors to take common action against their silent foe

'On the coast near the mouth of Wâdy Semsim, which at this point flows north-west, the sand encroachment, proceeding north-east by east, is evidently arrested by the waters of this stream, for on its left side are high sand banks dropping abruptly into the water, while to its right is low cultivated land

'The method of progression of the enemy here is plainly visible, for the whole country consists of sand-banks sloping down at 10° towards the prevailing wind, and at 30° to 35° on the lee side Thus the sand is gently rolled up the slope of 10° by the wind, and then falls down the other side by its own weight, so that it actually does quietly advance towards the object it intends to overwhelm in banks 30 feet to 50 feet in height

'It is curious in traversing these sand hills to come upon the site of some orchard which has been covered perhaps for hundreds of years You suddenly come upon a sort of crater in the sand, 40 feet deep, at the bottom of which flourishes an apple-tree, then you come upon a fig-tree growing in the same manner, and lastly upon a little patch of ground, quite below the level of the sand, with a house attached, but even this patch of ground has several feet of sand over it. The husbandman's chief duty appears to consist in dragging up the sand in baskets from the bottom of the craters to the surface The trees growing in these little hollows are very fruitful, and no wonder, for they have no wind, plenty of sun, and good moist earth to grow in, the superincumbent sand, being a non-conductor, prevents evaporation from the soil below, and keeps it moist through the summer.

'During the time I was in Philistia, I examined and surveyed 800 square miles, and my time was so fully taken up with the work by day and night, that there was little time for any other examination, the latitude and longitude of more than 200 points on this plain are now fixed and published for the first time

'We were out from sunrise to sunset every day, but we did not suffer from the heat, though it was often up to 100° in the shade during the afternoon, in the night-time it was comparatively cool, going down to near 70°, except during the sirroccos

'*May 24th*, 1867.—We left Jerusalem on a month's tour in the plains of Philistia, intending to try and photograph the monuments in the mosque at Hebron, and we were provided with letters from the Pacha of Jerusalem for that purpose We travelled with much pomp and ceremony to Hebron, being accompanied by a lieutenant and four zaptis, who were to secure us admission to the mosque I had had a sharp attack of fever on the 22nd May, and only got out of bed to get on horseback Corporal Phillips also caught the fever on our arrival at Hebron, but our ride down to Gaza, where we arrived May 29th, brought us round again Riding all day in a hot summer's sun is a queer remedy for fever, but I have tried it more than once with success.

'On our way down we met women in the villages acting the part of mourners The conscription was going on, their husbands were being taken away Soldiers, they say, never return to their native villages, so they are mourned as dead men, and the widows marry again shortly

May 30th—I had been requested to proceed a few miles south-east of Gaza in search of the Tels Jema and Gerar, supposed to be the ruins of the city Gerar (Gen xxvi), and spoken of by several authors as having been discovered by the Rev J Rowlands In Van de Velde's "Memoir" (1858), p 115, we have the following "Um el Jerar, the site of Gerar, at the foot of Tel Jema in Wady el Adai, recognised by a few scattered stones in the vicinity of some fine springs, was therefore laid down in our maps according to the information of the natives"

'On making inquiries I easily learnt the position of Tel Jema, and the only difficulty in the way was the permanently unsettled state of the country about this borderland, which being almost common ground, appears to be constantly liable to raids from tribes from the south Just now, the wheat having been recently gathered, there were many wandering bands of strange Bedouin about, who appeared to sniff our two zaptis from afar and long to punish them

'On making arrangements for passing a night at Tel Jema, our zaptis broke out in mutiny, so paying off the most blustering of the two, we set off with the remaining man, a black, ordering the muleteers to encamp beside the "fine springs" at Gerar or Tel Jema

'We soon left Gaza behind us and entered upon a rolling plain covered here and there with the stubble of the wheat The natives of these parts are roving farmers—a turbulent lot of a nondescript race, who are constantly in trouble either with the local government or with their own allies the Bedouins, every now and then compelled to build themselves villages, they are again rendered homeless by raids from the south, and thus being constantly exposed to dangers from all sides, they are somewhat reckless in their behaviour, and it is not uncommon to hear that the soldiers of Gaza have been ordered out against them Still, they appear to thrive and to be well-to do, no doubt partly on account of the richness of the soil, but partly by doing a little foraging on their own account and putting it down to the Bedouin, or else by acting as "jackals" in the raids which are sometimes made on the villages of the fat Philistian plains

'Their land may—must—be very productive, but as we wander on up and down the wâdy banks and over the swelling hills, it appears to be a series of semi or wholly barren wastes, interspersed with sand-hills on which linger a few solitary fir trees, though in the far west, on the sea coast, may be seen clusters of date palms around the villages, with the line of telegraph wires from Gaza to Alexandria rudely preventing our losing ourselves in thoughts of the past

'I had always pictured to myself a peculiar region for the scene of Isaac's life, perhaps from its name of Goshen corresponding with the name of the fertile Egyptian tract (Gen xlvii 11), "the best of the land," something to compensate for the difficulty of his position. But there is nothing at the present day to bear out the idea, and it strengthens our opinion of his obedience to the divine command when we find how he gave up the pleasures of freedom, of a wandering life, or of settling in a country like the rich plains to the north of Gaza, in order to dwell in this tame and monotonous solitude Perhaps to his gentle and peaceful nature there may have been something congenial in the character of this country, but

to a European it simply presents the disadvantages of a desert and of a settled life without the joys of either

'We had not advanced far into the plain before we came across Wâdy Sheriah, and I became aware that this portion of Van de Velde's map, put in on Bedouin authority, was hopelessly in error, but I found little chance of correcting it, for there are few prominent points, and one sand-hill is the veritable twin brother of the next, and so on, after travelling south from Gaza about 8 miles, we came full in front of Tel Jema on the south side of Wâdy Guzzeh, having to its west a little patch of cultivated ground on which melons were growing But where are our tents, and where are the fine springs of Gerar? *Mafish, Mafish,* nothing but Tel Jema and its melon beds The Tel itself is a mound similar to those of Jericho, the Jordan, and Arak Menshiyeh, artificial, and covered with pottery and broken glass, and no doubt marks the site of some ancient stronghold or city I now inquired from the natives for other ruins, but they denied there being any nearer than Sbeta, or any water either, except Tel Sheriah, where they say there are streams of water Is not this latter likely to be the looked-for Gerar seen by Mr Rowlands? At Tel Jema itself, they said they obtained their water from Tel Ajul on the sea-coast, the mouth of the Wâdy Ghuzzeh, and there we were directed to proceed as being the only place where our tents could be pitched There are here a lagoon and some springs of medicinal water, very nasty to the taste, but just the very stuff to carry off the ill effects of our fever, and we returned to Gaza next day nearly well On our road through the sand-hills we came across a great lizard, looking like a small crocodile, we gave chase and ran it to bay under a little sand cleft On going up to it it puffed itself out, and opened its mouth so wide that we stood around, not venturing to touch the beast, and eventually stunned it by swinging a leaden plumb bob on to its head, we then tied him hand and foot and fastened him on the rug behind the saddle of the dragoman, who was rather nervous about his companion coming suddenly to life again We then rode on to Gaza, and met a good many Bedouin on the road, who shouted out after us, "Warren! Warren!" It did not strike me first as odd, but when they all began shouting out my name we were a good deal puzzled On getting into camp we tied the beast, now quite lively again, to a stake in the ground, and let him get in the shade under the lee of my tent The townspeople soon began to flock around us, and I heard repeated exclamations of "Warren!" and on going out to see the reason, found them pointing to the lizard, and discovered that I had a namesake inhabitant of the desert. This animal is well known on the banks of the Nile, but I am not aware that it has been seen in Syria before by Europeans, and as I was anxious to get him forwarded to England, I sent him in a cage to Dr Chaplin, at Jerusalem, who identified him as the Nile lizard, he was taken to be examined by some of the English residents, but after getting into a harmonium and refusing to be dislodged for some time, it was considered desirable to return him to the care of Sergeant Birtles, who was encamped outside the town He throve very well until a certain Sunday morning, when he was tied hand and foot and put into a pit so as to be very safe, and a Nubian guard was told to watch that he did not escape On return from church he was not to be found, and nothing was heard of him for three years When we were leaving Jerusalem in 1870, we learnt that this animal, when cooked, is a very favourite dish of the Nubians, and that some Nubian friends of our black guard having come to visit him, they had together regaled themselves on my unfortunate namesake

'At Gaza we were encamped under an aged tamarisk tree (see No 255 photograph) I paid a visit to the governor, who gave me leave to visit the mosques, and served me with the

best cup of coffee I have tasted in Syria The old church, described by Porter, is well worth a visit. On one of the white marble columns in the nave is a Jewish seven branched candlestick sculptured, it was out of our reach, but there is no doubt about its existence, it is on a square of about 6 inches Some of the columns appear to be of granite We could find no vestige of ancient Gaza outside the city June 3rd, left for Askelon, 13 miles in a straight line At the present port to north-west were bones and jars collected ready for exportation, and a few coasting-boats in the offing Passing over the drift sand, we came here and there on craters, 30 feet to 40 feet deep, at the bottom of which would be growing a fig or an apple tree laden with fruit.

'ASKELON.

'From our tents, pitched upon the brow of the cliffs overlooking the ocean, we commanded a splendid view of the ruined city, its walls thrown up in fantastic confusion, half covered by the luxuriant growth of fruit trees, or by heaps of drifted sand—strange contrast of fertility and desolation useless it would be to attempt a more complete description than that given in Murray's guide, or the "Land and the Book" I shall content myself with touching on two or three points

'The city is 24 miles, as the crow flies, from the present ruin of Timnath, whence Samson came to plunder the thirty change of garments for the payment of those who had expounded his riddle, though this is the only incident with regard to the old city recorded in the Bible, yet it is impossible to visit these ruins at the present day without realizing, perhaps more than in any other ancient city west of Jordan, the utter overthrow of power that has taken place, the desolation which reigns supreme, the walls of indurated sandstone, though now of small sized stones, were once formed of massive blocks, as is seen by the remains here and there that have not been cut down for other purposes, or carried away to Acca or Saidon, great columns of granite, 17 feet to 18 feet in length, and 2 feet to $2\frac{1}{2}$ feet in diameter, project from the faces of the existing walls, used as thoroughbonds, though hardly necessary it seems, for the intensely hard mortar has united the stones into one solid mass, which has only again been broken by some great force, probably gunpowder Examine these walls (photographs Nos 257—259), great discs of masonry overlapping each other in confusion, and it is apparent that they have been overturned at no very remote period Some of these walls may have been built by the ladies of England as an offering to their country and lion-hearted king ("Chronicles of the Crusades") during the Crusades

'The view (No. 256) shows us the sycamore fig-tree, now loaded with its burden of fruit, the hollow fig, which, though refreshing when picked from the tree, is considered too inferior a fruit to be eaten by any but the poorest of the people See how the trunk of the tree, acted upon in its early growth by the prevailing wind, the sea breeze, has bent over the narrow pathway for nearly 30 feet, at a distance of 8 feet to 10 feet from the ground, offering a secure seat to any who, like the lowly Zacchæus, wish to have a view of all that pass that way

'In No 256 we have a picture of the sea-coast with the surf breaking on the shore Just outside that surf, as we were coming up from Gaza, we observed a large shark moving about, and on going down to the beach at Askelon, at sunrise, to have a swim, I saw two sharks loitering about within a few yards, apparently waiting for me, and not wishing to gratify their appetites, I dabbled in shallow water These sharks are larger than any I have seen in these latitudes, and their appearance reminds us that this is the coast on which the prophet Jonah

was disgorged by the great fish that had swallowed him up A few miles further up the shore to the north is the Neby Yunas, the monument of Jonah, which vies in tradition with another point near Saidon as his landing-place The booths used in the gardens by the watchmen of the fruit-trees also remind us of his history, for they are similar in construction to that gourd-covered booth he rested in outside of Nineveh

'Mentioning booths, I would draw attention to 1 Kings iv 25 "And Judah and Israel dwelt safely, every man under his vine and under his fig-tree" This, of course, is a poetical expression, but as at the present day, during a portion of the year, the natives actually do live under trees or in booths, it is reasonable to suppose that the same custom obtained among the Jews, and, in fact, we know it did obtain Lev xxiii 42, Neh viii 14, 1 Sam xxii 6 And such being the case, it is probable that the names of trees giving the necessary shelter would be used in the poetical expression

'To live in booths shaded by the vine, by creepers, by dry bushes, is very common at the present day, but I am not aware that the fig-tree is ever used as a shelter for man On the contrary, its rank leaves have a most repulsive odour, the juice is supposed, when it touches the eyes, to produce opththalmia, and to sleep under its shade is said to be a certain receipt for the production of fever In Spain, also, there is the same opinion, a fig-tree near a house is said to be unwholesome, and to keep an animal under it for any length of time is supposed to produce madness or death

'About Askelon there are the most delicious apples, which were just now ripe, fully equal in flavour to any I have tasted elsewhere, but, in keeping with so many of the Palestine fruits, they are sadly in want of proper treatment; they have dwindled down to one-half the bulk of an ordinary English eating-apple Dr Thomson speaks of these apples of Askelon, but Dr Tristram ("The Land of Israel," p 604) suggests that he mistook the quince for the apple, and doubts whether apples grow in Palestine at the present day

'Although so little remains of ancient Askelon *in situ*, coins and bronzes are constantly being turned up by the plough and by the crumbling of earth during the heavy rains, at this time agents come down from Jerusalem and buy up all that they can lay hands on, and sell at immense prices to pilgrims in the Holy City I was able to secure on the spot some small bronzes of the Egyptian gods Osiris and Isis, and also a very elegant mutilated figure of Hercules, and the remains of a fish god, the greater portion, however, of the bronzes are distinctly Egyptian, and similar to those in the British Museum, the coins found are generally Roman, or of the Crusaders, or Cufic.

'*5th June*, 1867.—Askelon is 10 miles from Ashdod, in a straight line We left the former at 8 a m, and passing Abu Mushad, an eminence and tomb from whence the minarets of Gaza can be seen, we passed in a few minutes remains of buildings of Ibrahim Pacha, and among other objects a well 120 feet deep, with a staircase running down around the side Leaving Mejdel with its minaret to our right, we came on Hamâmeh, at 4 miles, situate on the edge of the sand-drift, the next village to be submerged A Greek Christian came out to meet us, and insisted on our coming into his courtyard and feeding on watermelon, and then produced several articles for sale, among the rest a pot of well-preserved bronze Roman coins. We had not time, then, to strike a bargain, and on inquiring for them a few weeks after, I learnt that a commissioner for a collector at Beyrout had carried them off On leaving this village we kept the drift-sand close to our left, and shortly passed a small masonry erection in which water is daily deposited by the people from the neighbouring villages for the benefit of passers-by—a very kindly arrangement in a dry land, if they would only take

the trouble to keep it clean Passing now over a country tame and uninteresting, we arrive at Esdud (Ashdod) shortly after mid day I went from here to the sea beach, a distance of 3 miles, in search of any remains of the ancient city, but nothing could I see but endless mounds of drift-sand, over which we stumbled ankle-deep, on the shore itself are the ruins of a rectangular barrack of sandstone, similar to the walls of Askelon, and at about a third of the distance on the road to Jaffa It probably was a station connecting the two cities, it measures about 120 feet by 50 feet, with semicircular flanking towers at each angle, and two on either side No ancient pottery or glass was observed about, but there were a few broken bottles of modern construction, which looked as if they had once held beer

'Ashdod itself is a mean Mahometan village, situated on a gentle eminence, surrounded with beautiful gardens and palm-trees, but with no signs whatever of its ancient grandeur visible, if we may except the sarcophagus shown on photograph No 263, supposed to be of an early type The view of the Persian wheel (N'aura) driven by a camel, and of a palm-tree, Nos 264 and 262, were also taken in this village To the west the sand rises high above the gardens, and each year swallows up a portion In the centre of the village is the usual elevated mound of rubbish, here of a considerable height, ending in a conical peak—a good theodolite station, and there we proceeded at sunset, just the worst time for observing, as then the Fellahin are returning from their daily labour We were soon surrounded by the entire village, who in a half defiant, half good-humoured manner advanced to the attack, determined to capture our instrument, which they considered to be exerting some sinister influence over the country, luckily the mound was steep, and as they came up we pushed over the foremost upon those behind, and managed to keep our position until the pole star was observed I was obliged, however, to complete the observations next day, when the men had left the village The sheikh came in the evening and made his apologies for the uproar, and affected great penitence

'On June 6th and 7th the country to north and east was surveyed About 1 mile north east of Ashdod the wâdy from the Valley of Elah (now Wâdy es Sumt) effects its junction with another from the south which runs by Kuratiyeh They are here the merest ditches, about 6 feet wide and 4 feet deep, and just now are quite dry. Their course was followed to the sea coast at a point 4 miles north of Ashdod, where they form lagoons of shallow water supplied by the oozing up of water from the soil, and separated from the ocean by a bar of sand Neby Yunas is built on an eminence at this point

'The villages on the flat plain about Ashdod are as like each other as so many peas, and there is very little of interest to be seen in them, but they had nearly all to be visited, if it was only for making sure of their names, as the people were not at all inclined to give information. Many of them had been down south working on the Suez Canal, and seeing our surveying instruments, they concluded that the English were going to cut a rival canal through Philistia and the Judean mountains to the Dead Sea, and to this they strongly objected, as they considered it would be the signal for our retaking possession of our inheritance, for they told me over and over again that they had taken the land from us, and that we should wrest it back from them again, but then, many of them added, "You will have to fight for it, we will not give it up without a struggle"

'At el Juseir we saw a white marble column and effaced capital, and at Summeil, a few bevelled stones The ruins of the ancient towns about here are probably buried only a few feet below the soil

'On the evening of 7th June we were camped at the foot of Tel es Safiyeh, the Alba

Specula, or Blanche Garde of the Crusaders, probably Gath of the Philistines It is 15 miles due south of Ramleh, and 12 miles to south east of Ashdod, the meaning of its name, Alba Specula, will be understood on reference to the photograph (No 265), where the glittering white chalk cliff at south-west angle is shown, a conspicuous object which can be seen for many miles to west.

'To the east the country was surveyed, the first range of the hill country, the only village of interest visited was Kudna, where there are remains of a castle, ancient walls, and large stones about; much of it appears older than the time of the Crusades, but there are also pointed arches, casemates, and plenty of modern ruins It is 5 miles south east of Tel es Safiyeh, and to its north by 2 miles is the village of Deir Dubân, where are enormous caves similar to those described by Dr Robinson at Beit Jebrîn. In one several inscriptions were found cut on the rock and on plaster, apparently over a passage which has been built up The Syrian Bishop of Jerusalem pronounces them to be Syriac, and to be the work of Christians who emigrated here from the Holy City at the time of the Persian invasion There is a Byzantine cross over one of the inscriptions

'On June 10th we left Tel es Safiyeh for Yebneh Port, a distance of 17 miles in a straight line north-west, passed along the Wâdy Sumt by Tel et Turmus (a village with no hill) and Kustineh, and then turning off to al Mesmiyeh, went due north over undulating hills past Emazmah (ruin) to Shahmeh on the north bank of Wâdy Surah. This latter wâdy runs north-west through a gap in the hills of el Mughâr and Kutrah, passing to the east of Yebneh town, and approaches the ocean about 1 mile to the north of the ancient port of Jamnia (Yebneh) There are at the mouth of the wâdy lagoons and fresh water springs, but no water in the wâdy during the summer months

'I may here make a suggestion with regard to the position of the cave of Makkedah, where the five kings took refuge when pursued by Joshua from Gibeon (Joshua x 5)

'We have, Joshua xv 41, the towns "Gederoth, Bethdagon, and Naameh, and Makkedah" placed together, and we have at the present day, Kutrah and Mughâr close together, Naameh 6 miles north-east, and Beit Dejan about 12 miles to north I have to suggest that the village of el Mughâr (the caves) is the modern name of the ancient Makkedah, and the desirability of making further researches at this place. It is true that several authorities place Makkedah further to the south of this point by several miles, but the writer of the article "Makkedah," Smith's "Dictionary of the Bible," appears to establish the fact that it must have been situate at no great distance from Ramleh, and el Mughâr is less than 8 miles from that city

'There was little to be seen at Yebneh town except the church now used as a mosque, but excavations would probably uncover the old fortifications, it is admirably situated as a fenced city The ancient port is some 4 miles distant, a large plan of it is given on one of the Admiralty charts of the Syriac seas The photograph No 267 gives a view of the southern end of the port, where are many confused ruins

'From this point we rode up to Jaffa, 10 miles, to obtain our letters, the weather extremely oppressive, in spite of the sea breeze —"As cold water to a thirsty soul, so is good news from a far country"

'*June 12th*—We left Jaffa for the little village of Surah, 23 miles in a straight line For the first 10 miles to Neby Kundeh, we passed remains of walls and terraces on the hills, which have now a coating of drift sand over them. We passed next through olive groves and gardens past Zernuka, until crossing over some undulating hills we came across the village of

Akir, the ancient Ekron, with no remains of its fallen greatness. The people were very civil, and one old man came out and babbled forth a story about the villagers being descended from Jews. As it is 5 miles from Yebneh town, the great seat of learning in the time of the Maccabees, there may be some foundation for the story. Ekron is on a swelling mound only about 2 miles to the north of the Wady Surah, the valley up which the milch kine probably conducted the ark to Bethshemesh, and during harvest time there is a good road all the way. From here we gradually ascended the hills by Mansurah and Kuldah, and passing the ruins of Beit Far to our right, arrived at the 'Ain of Surah by night-fall, 870 feet above the sea. We had now a chapter of accidents, the dragoman, who had heard of his father's death that morning, forgot what he was about, and losing sight of us, wandered over the country, leaving us to find our own way. He did not arrive at camp till some time after us, and when he saw me he exploded in sobs, declaring that to have lost us on the road was a far greater grief to him than to have lost his father, he forgot to tie up his horse or give it drink, and so the poor beast tried to satisfy himself and tumbled into the well, whose waters were nearly 4 feet from the surface. On our way in the dark the observation book had been dropped, and add to this our head muleteer was taken ill with strong fever, and Musa, his second, was stung by a scorpion on the big toe. The poor fellow was brought into my tent in a very exhausted state, and on finding that the application of strong liquid ammonia to his toe had no effect, I applied it to his nostrils, saying, "Musa, smell this." He sniffed, but it had no effect. "Try again, Musa." Again he sniffed, but his agonized writhings prevented his nose touching the bottle. "Sniff as strong as you can, Musa," and this time he regularly inhaled the blistering vapour, and fell back motionless as though shot. We had hardly time to think what to do next, or to listen to the growing plaint that Musa had been killed, when a loud splash was heard, and a cry that the dragoman's horse had tumbled into the well. The poor beast was swimming, but had no chance of getting out by himself. The guy ropes of the tents were quickly on the spot, one we tied round his head and shoulders, and the other tight to his dock, and soon we were all tugging away at the animal. By some desperate efforts we at last got him on dry land, somewhat worried by the ropes, but not permanently the worse for his rough usage. Among the most energetic of the party I thought I perceived Musa working away, and sure enough it was he, come to life again. After it was all over I asked him how his toe was, but he had forgotten all about it, either the ammonia or the excitement of getting out the horse had effectually cured him.

'In the morning our observation book was found, the head muleteer was, however, very ill with fever, so we had to make this spot our headquarters until 15th June, when he recovered sufficiently to move: it was astonishing how he would swallow strong doses down without their affecting him in the least. A sirocco wind was blowing at this time, when the heat was between 80° and 90° during the nights, and made us all very uncomfortable. In the survey of the country to the north of our camp nothing of importance was observed.

'The village of Surah (the ancient Zorah) stands about 1,150 feet above the sea, and is situated on the southern end of the hill crest overlooking the valley of the same name. On the opposite side of the valley low down is the ruin of 'Ain Shems (the ancient Bethshemesh), and from our stand-point it is easy to see the line which the milch kine would have taken in coming up from Ekron, and also the valley which the men would have ascended in carrying the ark up to Kirjath-jearim. Looking across the valley to the opposite crest, we can see the ruin of Tibneh (the ancient Timnath), where dwelt Samson's betrothed, it is 740 feet above the sea, and therefore not in the plains, as some writers have stated. Samson in going down

to it would descend 700 feet into the valley and then ascend again 350 feet to Timnath. It is apparent from the sacred narrative, Judges xv, that the corn was growing in the valley, as it does at present, with the vineyards and olives lining the side of the hills, for we are told that the Philistines *came up* to Timnath and burnt Samson's wife and her father with fire Tibneh lies between El Bureij and Ammûrieh

'The hills about bear witness of there having been once an industrious race inhabiting these parts, but the words of King Solomon may apply to the present owners, "I went by the field of the slothful and by the vineyard of the man void of understanding and, lo, it was all grown over with thorns, and nettles had covered the face thereof, and the stone wall thereof was broken down Then I saw and considered it well, yet a little sleep, a little slumber, a little folding of the hands to sleep so shall thy poverty come as one that travelleth, and thy want as an armed man"

'Photograph No 271 gives a view of the valley of Zorah, and No 272 of a curious monument placed upon a hill 1 mile to the west of the village, the top stone is 6 feet long and 3 feet by 2 feet, and has a groove 2 inches deep and 3 broad down the centre of each side—it appears to have been for a mill of some sort, probably for olives The hill country commences to the east of 'Ain Shems, and the valley of Surah is seen no longer, being broken up into the steep defiles of Wâdies Ismail, Muttûk, al Balût, and others coming down from the hills, there are many ruins about the broken ground formed by the junction of these wâdies, and no doubt it was once densely populated Many cut stones were found about of large size, which had been used as mills In Wâdy Muttûk, near Eshua, we found running water and a spring hard by, but it is soon absorbed by the thirsty soil.

'Near Tantûrah there are the remains of a tower 30 feet square, of large squared stones The ruins of 'Ain Shems extend many hundred yards east and west The points were fixed independently by Lieutenant Anderson and myself, in our longitude we differ somewhat, and in our latitude one quarter of a minute (in my letter, 22nd November, 1867, printed in the *Times* and in the "Quarterly Statement," this difference was given as four minutes, the one-quarter being turned into four)

'*June 15th*—We left 'Ain Shems 2 5 p m, and arrived at a spring, Bir el Lemûn, at 2 45, and keeping to south arrived at Tibneh at 3 30 There are few vestiges here except caves in the rocks Not far off is el Bureij, where we arrived at 3 43 Passing from here west, we were at Ammûrieh at 4 20 p m, where there are the remains of a castle, and progressing to west, at 4 57 we came on Khûrbet Ferrad, where there are extensive ruins, keeping to west, several observations were taken, until it became quite dark, and our guide brought us back over the hills to Beit Natif, 1,200 feet. This is a village of some importance at the present day, but is not mentioned in Scripture We here experienced the difficulties of Eastern hospitalities, we had run out of bread, but were too numerous a party to sponge upon our neighbours, and the people absolutely refused to sell, as they considered it too degrading, our dragoman had to go from house to house and beg a loaf from each, which we found means to repay afterwards.

'*June 17th*—Leaving Beit Natif at 6 45 a m, we passed Neby Bulus and Zenûa Alia and Yarmuth (Jarmuth), where there are extensive ruins, and passing through wâdies and marshes, we ascended the hill of Keishûm (1,150 feet), and leaving el Gina to our right, we traversed a range of hills bounding Wâdy Sumt to the north On our way we met two old men, who assured us that the country belonged to the Christians—the constant repetition of this maxim sometimes appeared to be satirical

'11 5 a.m we passed Moghullis, and leaving a quarry to the left, arrived at Sheikh Daud at noon, here we were (600 feet) on a projecting spur, 1½ miles due north of Tel es Safiyeh From this, proceeding down to the plain due north, we came upon a very extensive ruin in the valley, called Khŭrbet er Rasim (foundations), and after examining the country arrived at Tel Zakariyeh by sunset.

'We were now in the valley of Elah, and from this point I surveyed the country to east and south On 19th June examined the country about Um Burj, and found extensive Christian remains on the brows of hills, large lintels 6 feet long and 2 feet thick, with crosses, etc, sculptured on them, the stone has a bell-like sound when struck, and is of soft *mezzeh*

'Near Um Burj is a cave or columbarium On getting on the hog's back, on which is the ruin Jedeideh, we appeared to be among ancient remains, but before this everything to-day seemed to be of the Christian period, arrived in evening at Tel Bulnard, 2 miles north-west of Beit Jebrin

'*June 20th*—Musa, who had gone up to Jerusalem for bread, arrived in an exhausted state, having been pursued by two mounted and four foot Bedouins, he had turned down Wâdy es Sumt and come over the hills, leaving his pursuers behind We were engaged the whole day in examining the country up to Arak Menshiyeh, where we encamped Here there is a strange mound of earth (see photograph No. 274), called the Arak, while the village is distant some 400 yards or so. This mound is triangular in plan, and appears to be of Assyrian origin it would be very desirable to cut a hole through it and examine its contents

'*June 21st*—We passed down by Faluj, past the ruins of Eglon and Lakis, and villages of Bureir and Simsim to Nijid Nothing remains to be described here after the account of Dr Robinson At Eglon we found Bedouins from the south, but one of them got his ears boxed by Corporal Phillips for venturing too close to his horse, and they did not bother us further.

'*June 22nd*—From Nijid I wished to take a straight cut east to Duweimeh through the deserted hills south of Wâdy Hessy A villager volunteered to accompany us, our baggage going round by the royal road, the distance in a straight line 18 miles Leaving at 7 10 a m, we saw from the top of the first eminence the ruins of Zeita, Bableyeh, Aran, and Beit Deras, on the hills above Simsim Leaving this point at 7 45 a m, we passed to east through hills of indurated shells, and leaving caves to our right, arrived at Khŭrbet Kums at 8 7 a m, left 8 10 Viewed Neby Hûd on Wâdy Mehareh 8 11, and at 8 22 came on Khŭrbet Jelameh, a ruined site, 130 yards by 10 yards, with cisterns At 9 10 a m we got down into Wâdy Hessy, a fantasia was here enacted for our benefit Two Bedouins came up and robbed a camel driver, but we did not see the joke in the way it was intended At 11.5 a m. we arrived at Tel Hessy, an artificial mound to south-west of wâdy, elliptical north west to south-east, water running in wâdy, left 11.23. We now found a beautiful stream of brackish water in Wâdy Hessy, and turned south to Tel Nargily At 12.30 passed a hard clay threshing-floor, and at 12 40 p m arrived at the Tel Here there is a spring of fresh water welling out of the rocks in the midst of a salt and barren land The Tel is artificial; a great deal of cut stone and concrete about, and graves on top; extensive ruins on all sides, but of no decided character Left 1 10 p m, passed Arab camp, where they wished us to stop the night, and passing by some ruins and caves, arrived at Duwaimeh at sunset

'*June 24th*—From the wely near this town observations could be taken to many of the

most important points to the north. We left at 7 45 a m for Beit Ulla, and at 9 50 a m passed Tel ed Dewar, an oblong mound 50 feet high, close to the village of Lukbeibeh, one of those villages which the Government have caused the Bedouins to establish At 11 5 passed a Crusaders' ruin, and at 11 45 arrived at Santa Hannah, close to Beit Jebrin, an artificial mound I here broke the glass of my prismatic compass, and found the instrument useless for the remainder of the day. With the aid of a ruby, however, which I had purchased at Askelon, one of the photographic plates was cut down in the evening to the required size, and made to replace the broken glass

'*June 25th.*—Several ruins were examined, but nothing of importance We encamped in the Wâdy es Sumt (the Valley of Elah) under a large butm tree, probably the largest in Palestine See photograph No 275 To give an instance of the adroitness of the Arabs, I may mention a scene which took place here On arriving at our tree, we found the cook and a Fellah struggling violently, and each with a stone in his hand cracking into the other's head After separating them, I inquired the cause of the disturbance, and the cook said the Fellah had kicked dust into the soup, but the man asserted that the wind had blown it in They were both very violent in their movements, and the Fellah accused the cook of having pulled his beard, and after several absurd gesticulations, he picked up a tuft of hair from the ground and showed us the place where it had been plucked from his chin This of course was a very serious offence, only the cook denied having touched the man's beard The dragoman at last came up, who soon settled the matter, for he recollected that the cook had just cut off some huge locks from his head, which the Fellah had made use of by declaring they were part of his beard On looking at him closely we found that his beard had never been touched, but it was one of those which do not grow luxuriantly just under the chin The man had been rather badly cut about the head by the stone the cook had wielded, and was bleeding profusely, but he would not allow his wounds to be dressed, as then he said the Sheikh of his village would not see how he had been treated, and he marched off indignantly to call on his friends to attack us during the night We were just now in the track which the Bedouins use on their marauding expeditions, so we found ourselves threatened from two points, all we could do was to keep strict watch all night, and hope that the villagers would cross the Bedouins and keep clear of us We awoke in the morning without any mishap, but not by any means due to our watchers, for on waking once near dawn, I found all snoring fast, and could not disturb them by sticks or stones

'Near this tree probably took place the combat between David and Goliath Suwaikeh (the ancient Sokoh) is on the hills to the west by 1 mile From here we made our way surveying to Beit Atab and Deir al Howa, both prominent points in the hills of Judea, 1,790 and 1,780 feet above the level of the sea. From here we observed to the points where we had observed from in the plains June 28th we arrived in Jerusalem'—Captain Warren, 'Quarterly Statement,' 1871, pp 82—96

REMARKS ON A VISIT TO 'AIN JIDY AND THE SOUTHERN SHORES OF THE DEAD SEA IN MIDSUMMER, 1867

'In being desirable to photograph several objects of interest in the southern shores of the Dead Sea, previous to the departure home of our photographer, an expedition was arranged. Our party consisted of Dr. Barclay, Mr. Eaton, myself, and Corporal Phillips (photographer)

'Visits to this part of the Dead Sea had been hitherto made during the cold weather, and whether Franks could stand the heat in midsummer was quite a matter of conjecture, we knew that the Bedouin abandon the lower shores at this season, and we went down fully prepared to beat a retreat if we found the heat too much for us Many good friends endeavoured to deter us by evil prognostications, and conjured up horrors, by anticipation, on our road, sufficient to frighten a nervous person into a fever

'The ground about 'Ain Jidy belongs to the Resheidy, an insignificant little neutral tribe protected at present by the Ta'âmireh, and it was with a sheikh of the latter tribe that we were to make our agreement, he was to take us down to 'Ain Jidy and Sebbeh (Masada), and bring us home, he would not undertake to go farther with us, as even Masada was beyond the Resheidy's territory It appears that the ground along the shore from 'Ain Jidy to Jebel Usdum is a sort of neutral ground, formerly claimed by the Jellahin, but, since their decay, under no control whatever This road has been the highway for predatory bands passing north and south since the time of Abraham, and was just now considered particularly unsafe for Franks, unless escorted by a strong guard

'Of course we had to go through a considerable amount of coquetting with the sheikh before he would come to terms, but owing to the good offices of Mr Wood, the acting consul, the arrangements were completed within twelve hours

'We had in the meantime been getting ready our caravan, and as we were going into a country utterly barren, we had not only to carry with us the whole of the corn for the journey, but also huge goat-skins for water, and spare mules to carry them

'We made the Frank Mountain our starting-point, where we found the tanks just running dry, and the water of the muddiest Early next morning (Saturday, 6th July) we started, passing Tekoa, thence down Wady Hasâsa, and arrived at the top of the 'Ain Jidy pass about 4 p.m.

'The view from this point was magnificent, the sky was clear, we were 2,000 feet above the Dead Sea, and yet as it were hanging over it, the sea below us appeared of an intense blue, with yet a curious milky film over it, with here and there dark moving spots passing along, as if floating islands, the hills beyond were thrown by the setting sun into striking contrasts of light and shade, the rocks being of a rosy tint, below, on the narrow strip of the Ghor, a vivid green struck the eye, which one could almost conjure into the palm and other tropical trees we knew to be growing there The hills themselves were not in one monotonous line, as seen from Jerusalem, but collected into masses of different heights, broken by deep and narrow gorges, above one of which Kerak was to be seen, the houses and battlements coming out most plainly in the glowing sunset It is seldom that the atmosphere in summer is clear enough to allow of a view such as we saw that afternoon We had to hurry on to get to our camp before dark; the road down is very bad, but not dangerous, it took us an hour to descend the 1,400 feet, and then we found ourselves on the little sloping spur,

from the top of which 'Ain Jidy gushes, falling down by cascades into the sea some 500 feet lower We had felt the heat increasing gradually as we descended, and when we reached the 'Ain our thermometer (after sunset) stood at 95° Fahr, and we were still a good height above the sea (500 feet), the hot air from its shores coming up constantly in most disagreeable and stifling puffs

'We found our guards bathing in the 'Ain, but we bundled them out and turned in ourselves, and had a most delightful bath, though the thermometer in the water stood at 81°

'We slept very little that night, owing to the heat and noise We had a guard of sixty men, we had only paid the sheikh for thirty, but we did not feel very comfortable in the country of the Jellahin, and each man had his double All night long, camel loads of salt (from Usdum) were winding up the narrow staircase above us, and our guards kept up an incessant noise, talking to the camel-drivers, with whom they conversed at a distance of several hundred yards It is astonishing to what a distance the Arabs manage to pitch their voices when they wish it

'In the morning (Sunday) we were awoke by the first rays of the sun shining on our tent and raising the temperature to over 100°, we had to turn out quickly, swallow a hasty breakfast, and start off for shade, in the Wâdy Sudeir, in search of the grotto described in Tristram's "Land of Israel."

'It was out of the frying-pan into the fire, for the spur on which we were encamped lies between Wâdies Areyeh and Sudeir, and thus catches any stray puffs of fresh air that may happen to be straggling about, but Wâdy Sudeir is a regular sun-trap—a cleft with hills 200 feet in height at the mouth, and increasing towards the upper end We soon became quite exhausted, struggling amid the tall bamboos, and we presented a ludicrous spectacle, crouching down under the pieces of rock which gave a few inches of shade Eventually somebody found an overhanging rock near the bed of the torrent, with bamboos making a lattice-work in front, and we here collected our forces, the Bedouins wanting to share the shade with us It was a charming little retreat, only so very hot When we had recovered, the Church Service was read, and somebody producing an "Ancient and Modern," we were enabled to sing a few hymns, the sound being mellowed by the rushing noise of the torrent hard by An appropriate sermon on the Dead Sea fruit closed our proceedings We dared not, however, leave our retreat until late in the afternoon, when we followed up the torrent, coming upon some beautiful cascades, one of them 20 feet high After a little slippery climbing we arrived at the grotto of which Mr Tristram speaks so enthusiastically It is certainly a most beautiful spot (see photograph No 282), but I fancy more water was flowing from it when we were there, as we were unable to get very near it without getting wet through, the sun was now low, and we clambered back to our tents

'The next day was employed photographing, it was very trying work, but Corporal Phillips took some capital negatives—two of the grotto and hill above, one looking up the hill, one of an acacia and of the apple of Sodom The heat was extreme, and after sunset the thermometer stood at 110° on the shore of the Dead Sea

'*July 9th*, 1867.—After taking some angles with the theodolite, we left 'Ain Jidy at 6.40 a m for Sebbeh. At 8 50 a m we arrived at two fresh-water springs near the seashore, here we filled our skins and jars, as we were told we should find no more drinkable water until we arrived at Wâdy Um Bagkik, on the other side of Sebbeh

'The old fortress soon loomed in view, and we began to look out for shade among the curious flat-topped hillocks through which we were moving We could find nothing approach-

ing to shelter until we had passed to the south-east of the foot of Sebbeh, where we found one solitary rock standing over the bed of a dried-up water channel, at the foot of this was a narrow strip hidden from the sun, and here we were able to breathe freely We arrived at 11 a m , waiting for our mules to come up, we commenced our lunch, and had just drunk some wine when we found that the remainder of our water had been drunk up by the Bedouin We sent a mounted man back to get some more, but it seemed long enough before it came

'Our guides were very much exhausted, and our sheikh said he could not go any farther, we wished to go on to Wâdy Um Bagkik for the night, as there is plenty of water there, but he declined to go so far, as he had only contracted to go to Sebbeh, however, we put it to him that if he did not acquiesce in our plan, we should hold him to his contract to the letter, and make him take us up to the very top of the fortress, baggage and all At this he gave in, quietly remarking that the English always had their own way, but we found afterwards that he intended to have his way, for after we had sent a written message to the baggage party ordering them on to Wâdy Um Bagkik, he sent an express messenger to say we had changed our minds and wished to camp at the northern foot of Sebbeh For this little piece of treachery we were, at the close of the day, very thankful

'We now made arrangements for photographing, and left Corporal Phillips down at the bottom while we ascended, we started at 2 20 p m —Dr. B , myself, three Bedouin, and a little flask of water Our men had never been up before, and as we were on the wrong side, we felt doubtful whether we should double the southern side of the fortress and so get into the regular path, or should go towards the north Circumstances guided us we found that full on the eastern side we had less difficulty, and we thought to creep round at a higher level, when, however, we were about half way up we saw right above us a sort of broken path, and we were so knocked up that the danger of the short cut appeared as nothing to the long pull round We commenced scrambling up by a path more dangerous than difficult, for the natural lay of the rocks is such that they crop out perpendicular to the steep side of the hill, and thus each stone you scramble up is overhanging and ready to topple over and crush you, should your weight be sufficient to overbalance it. One of the Bedouin suddenly disappeared over a rock, suspecting him, I caught him before he had quite finished the flask of water with which he had been entrusted On getting close to the top we were nearly stumped before us were two upright pieces of wall, of about 15 feet each in height, without any apparent path, we found some toe-holes in these, and climbed up A false step here would have been destruction we arrived at the top at 5.20 p m and gave three cheers, re-echoed from below we found we had landed full on the middle of the eastern side of the flat surface of the fortress

'Whether the path we went up by or came down by is the "Serpent" spoken of by Josephus appears to be a question which cannot be solved by reference to Whiston's translation, but it seems probable that it should refer to the more difficult path to the east, by which we ascended.

'Josephus, B J vii 8, § 3 "Now of the ways that lead to it (Masada), one is from the Lake Asphaltitis, towards the sun rising, and another on the west, where the ascent is easier, the one of these ways is called the Serpent, as resembling that animal in its narrowness, and its perpetual windings and he that would walk along it must first go on one leg and then on the other, there is also nothing but destruction, in case your foot slip, for on each side there is a vastly deep chasm," etc

'Dr Lynch's party, in 1848, went up by the western path, and conjectured it was the "Serpent," from its windings, M de Saulcy, in 1850, also went up by the western path, and calls it the "Serpent," but the latter, in taking Dr Lynch's party to task on the subject, falls into an error in saying that besides the road he took "there is no other approach from the Dead Sea to Masada" (see note to page 228, English translation of De Saulcy's journey in 1854)

'Mr Tristram, in 1864, in "The Land of Israel," page 306, considers the "Serpent" to be the eastern part, and says "The traces of this we could easily make out at intervals, but the pathway itself is completely broken away, and it is probable that, for many ages, no unwinged creature has ever reached the fort from the east"

'Whether the "Serpent" is proved to be the eastern or western path is a matter of little moment, as they both wind considerably, but it is of some importance that we should have found the eastern path, and have come up by it, and have so far helped in a small way to verify the description of the Jewish historian

'As it would have been impossible for the photographic apparatus to be brought up by the eastern path, we shouted out for the party below to come round, and then we began to examine the ruins

'These are well described by Lynch, De Saulcy, and Tristram, and we were not long enough there to do more than make a short examination, but quite long enough to find that the place has not been half looked over, and that a stay of two or three days in the winter time on the top of this rock will be necessary before it can be properly examined and described.

'We found a large tank 91 feet long, 27 feet wide, and 60 feet high, with a flight of steps leading down to it on the plaster was written, "Cistern visited by William Tipping and Rev Samuel A'Court, 14th March, 1842"

'Some of the walls of the building are most curiously pigeon-holed Photograph No 288 shows one of these walls We attempted to go down to the round tower at the northern end, but I doubted the ability of the Bedouin to let me down 60 feet in safety They might not have intended any harm, but their practical jokes are rather rough, and a playful little slip of the rope of four or five feet or so at the bottom might have sent me flying down the cliff They never appear to calculate the result of what they do Irby and Mangles describe a joke played on one of them by a Bedouin on the east of the Jordan a scorpion was put up the sleeve of one of their coats

'After some delay, Corporal Phillips appeared with his implements, he was looking rather the worse for the journey, having tried a short cut across the chasm, and got a roll down the hill of some 20 feet It was so near sunset that the view of the Lisan and the opposite hills would not develop, but some of the views of the walls, etc, were successful A view was taken on either side of the pointed archway, on which are the mystic signs ♀ and △ I have seen ♀ on the flanks of the Jehalin camels, and believe it to be a Bedouin mark for the district or tribe. In Spain there are marks peculiar to districts and families, and the horses are all branded with them, just as we mark our sheep, and the camels here appear also to be branded according to their tribes or owners. To show how easily the marks can be made on the pointed archway at Masada, I may mention that just before photographing, I found that another astronomical sign had been added the artist, rather horrified to find that his handiwork was so soon to be put on record, hastily rubbed it out

'Our views were not completed by sunset, and as Corporal Phillips had got so knocked

about coming up, he elected to stop at the top all night in preference to going down and up again in the morning We promised to send him up some dinner, and started off by the western path We had not gone down far before darkness came on, and we soon found ourselves in difficulties. Our guides hardly knew the way, and as we could not see before us, we expected each step to find ourselves treading the air, being somewhat impressed with the account Josephus gives of the chasms on either side of the road Thankful we were when we met some men who had been sent up to find us with a light, but it was not pleasant to see that we had had some narrow shaves in the darkness We were now very glad that our sheikh had placed the camp close to the foot of the fortress

'With regard to the height of Sebbeh above the Dead Sea, with two aneroids taken independently I made it 1,500 feet. Mr Tristram makes it 700 feet higher This discrepancy is very great, but though I don't think there was any error in my observations, I cannot vouch for their accuracy, as the extreme heat made it impossible to observe with great care We sent some dinner up to Corporal Phillips, and some of the water we had left from the morning, which was very nasty The men, however, did not carry the water up. There is a nice little fountain near the top of Sebbeh, on the western side of the hills, which they knew of, and of which they told us nothing until next morning, after we had suffered several hours' thirst, and had had to drink stinking water Next morning we awoke, dull and unrefreshed As we looked out on the early dawn, a quivering mist hung over every rock, a heavy silence filled the air, and made us feel the utter desolation of the place, funny jagged flat tops of marly rocks jutted out in all directions, looking like castles slumbering under the enchanter's wand, not a sound from bird or beast could be heard

'The moment the sun rose all was changed: his rays lighted up and brought back life to the barren rocks, and we were in the world again

'Sending up Corporal Phillips his breakfast we left him a horse and mule, and hurried on with the rest, for, poor beasts, they had had nothing for nearly twenty-four hours, and were regularly parched up. Part of our way we noticed driftwood in a line 30 feet above the then level of the sea Our road then lay through the water, as the rocky shore was too steep, and it was pitiful to see the animals sniffing up the salt, bitter brine At 11 45 a m we arrived at Wâdy Um Bagkik, and found a beautiful stream of water in a deep gorge, where we could hide away from the sun We sat down to lunch, but were very anxious for our mules they took so long to get along, and came straggling in, each looking more done up than his predecessor Only one could not get up to the stream, and to it water was taken and it revived

'After we had lunched we attacked our sheikh on the subject of paying a visit to Jebel Usdum He refused decidedly, but to our surprise offered to go on and encamp for the night at Wâdy Zuweireh. This just suited us, and we said no more about it until we were ready to start It appears that the sheikh was afraid to be caught in such a trap as Wâdy Um Bagkik, and preferred to camp in Wâdy Zuweireh, because it was on the road to Hebron, and gave him some chance of beating a retreat if attacked

'When we were ready, we said we had made up our minds to go to Jebel Usdum, but that they need not come unless they wished, and we started There was soon an uproar among them, one asked another how he could go back to face his family and say he had left the Franks to their fate, and started off after us, soon others came tailing in, and in a couple of hours we had a troop of some five-and-twenty volunteers at our heels

'It was rather pleasant to see that the Ta'âmireh had some code of gallantry left among them, for they have fallen very low of late years It is very difficult for Franks to understand their ideas on etiquette Sheikh Goblan told me that it was no disgrace for him to run away in battle, because he carried no ostrich feather on his spear Like the pirate's flag, the ostrich feather is a sign of victory or death, and so the Bedouin who does not carry it can run away or fight it out, as he pleases

'As we passed the Wâdy Zuweireh mouth we noticed quite a change in our volunteers They had before been slow to come on, but now they were regularly in for the game, they became cheerful and bright, delighted to have a chance of bearding the Jehalîn in their country We passed on by the curious hill of salt, and examined "Lot's Wife," a very large pillar of salt, something like a figure out of a Noah's Ark At the eastern end we came on the mouth of a large cavern in the hill, through which a stream appears to flow in winter time; inside, the temperature felt quite cold after the heat outside, though it was hotter in there than the average temperature at Jerusalem in July We now found it time to turn back, and immediately our men relaxed their strict silence, as if all danger was passed, and fired a *feu de joie*, shouting and jeering at their absent enemies Had they known that a large party of Jehalîn were watching them from over the mountain sides they would not have been so confident, as at one time they had not a shot ready among them It appears that Mr Peter Bergheim was just returning from Petra (where he had been successfully photographing), and, suspecting that we were with the Ta'âmireh, succeeded in restraining his party from coming to close quarters with us

'The rock of Jebel Usdum is partially formed of enormous masses of salt, presenting a series of pinnacles and sharp angles formed by the sun and moisture in winter On our road we met with most beautiful specimens of salt crystals, like icicles, only pointing towards the sky we collected some of these, but they melted away at Jerusalem. As we were moving campwards, and were talking of "Lot's Wife," the attention of all three was suddenly attracted We saw before us among the pinnacles of salt a gigantic "Lot," with a daughter on each arm, hurrying off in a south-westerly direction, their bodies bent forward as though they were in great haste, and their flowing garments trailing behind. We did not get to our camp until some two hours after sunset

'Next morning we started for Hebron over a long and uninteresting road, the men did not know the country, and appeared ill at ease. One of the muleteers had a violent attack of fever, and could hardly stick on his donkey We had been a day longer than was expected, and the mules had had no corn that morning

'Soon four horsemen appeared over the brow of a hill and then retired. Our Bedouin became alarmed, got the baggage together in a clump, and consulted what they should do The scouts said there was a strong party of Bedouins dodging us to our left Our men now began to get excited, pulled off their tarbushes and abbas and flung them to the muleteers, and looked very wild, nearly naked, with the long tufts from their heads floating in the air One man would strike his breast and say, "Who says I'm afraid?" and then another would take it up. Eventually a great black negro nearly caused a fight among ourselves, as one of his comrades said he looked afraid, and the rest took sides. For several miles we went on parallel to the line of Arabs on our left, but gradually we lost sight of them They appear to have been the party of Jehalîn bound for Hebron, but not wishing to come in contact with us

'Towards evening we came to a well There was only one bucket for drawing water, and

a regular struggle took place We had to fight our way among the savages before we could get to drink It was now a question of what we should do, whether to stay by the water without food, or push on to Hebron without water We chose the latter, and succeeded in getting to Kurmel, a short distance south of Hebron, by ten o'clock Here we were lucky enough to find some straw lying about, and our mules had a feed on it Next morning we rode in to Jerusalem'—Captain Warren, 'Quarterly Statement,' 1869, pp. 143-150.

EXPEDITION TO EAST OF JORDAN, JULY AND AUGUST, 1867

(PLATE XLIX)

'While we were making our excursion to 'Ain Jidy, in July, 1867, a messenger had brought up Goblan from the east of Jordan, and we found him waiting for us on our return to Jerusalem An arrangement was made that he should take us over his portion of the country, and point out the principal ruins, etc

'The illness of Corporal Birtles was now my principal anxiety He had been taken with a sharp attack of dysentery just before our departure for 'Ain Jidy, and we left him in Jerusalem, and now, on our return, he appeared to be no better Dr Chaplin very kindly offered to take care of him during our absence, but in this case, he would have to go into town after having been some months under canvas, and this was very undesirable Corporal Birtle's own impression was that he should recover if he came with us, and after getting some medical instructions, I undertook the charge of him, but not without some fear that he would not return with us

'We left at 3 p m on the 17th July, 1867, and arrived at 'Ain as Sultân at 7 30 p m Our party consisted of our invalid, Corporal Birtles, the photographer, Corporal Phillips, his assistant, Edward Hanour, and Jerius the dragoman Our guard varied in numbers, according to the security of our position, from five to forty men Sheikh Goblan always slept close to our tents, and never gave me any trouble in camp He would come into my tent once a day for orders, stand up while he received them, and retire afterwards, apparently without ever thinking of sitting down

'When we were travelling I did not find him so pliable, he had got his line of route in his head, and the sights we were to see, and the going out of the line here and there, when surveying, disturbed him considerably

'*July 18th*—'Ain as Sultân Started at 6 30 a.m, and arrived at en Nwaimeh ford at 8 30 It was oppressively hot, but the thermometer only registered 98° Fahr

'The Jordan just now was very low, and there was little danger in crossing, for about 30 feet the depth was 7 feet or more, and for the remainder it was only 2 to 4 feet We had to wait some time for our baggage, but when it did arrive, we were only about an hour and a half in crossing. The tents and nearly everything else were left on the mules' backs, but the photographic apparatus and box were put on a horse's back, with a man astride behind, and several on each side, and carried across with much shouting When we crossed there were two Bedouins on each side, to hold our legs and guide the horse, and it struck me that they did their best to pull us off. Luckily all our horses had manes

'Photograph No 293 shows the ford just after two horses have carried some things over the deep part of the river Left the eastern bank at 10 50, and passed through tamarisk and acacia trees, at 11 15 got up on to the upper plain, and passed through acres of the dry shrub ghurrab.

'At noon we got into irrigated ground, and passed the only osha plant I have seen on the eastern side north of Dead Sea Still passing east, we arrived at the mound of Nimrîn at 12 30 p m Here are ruins and a sheikh's tomb, with a curious figure cut on a stone—a man on horseback with his sword hanging in the air in front of the horse's head. Also a capital of a column * Left at 3 p m, and passed through country well cultivated by the black Bedouins, at 3 30 Goblan showed us Neba, a lumpy hill overlooking the northern end of Dead Sea, on east side, at 4 p m arrived at the isolated artificial mound of Kafereim It was excessively hot here, and on the baggage arriving, eighteen of the fowls in the coops were found to have died Around us, on all sides, were rivulets passing through dense masses of underwood, and carried off here and there for irrigating purposes The amount of verdure on the eastern side, in spite of the hot sun, was quite remarkable after the burnt up aspect of the western side of the river

'*July 19th*—The heat during the night had been oppressive, but still Corporal Birtles was no worse, and there were hopes for him Minimum in night, 80° Fahr, at 7 8 a m, in shade, 91° Went down at sunrise to look for ruins, but the growth of underwood was too great to allow of our proceeding far on either side of the paths It is quite possible that there may still be extensive ruins about here, concealed by the verdure

'Left at 7 8 a m, and went south, at 7 40, Wâdy al Mashâideh, close to which is a warm spring, in a little basin concealed by rushes Temperature, 95° 5′ Fahr Left at 8 30, and turned to east and ascended Wâdy Hâdâd, which is the upper part of the Kaferein, 8 42 Wâdy Habathâ runs in on right, and there is a ruined aqueduct on left, at 8 56 Wâdy umm Adsîs on right, and at 9 15 Wâdy Artab on right There is here a very rapid stream in Wâdy Hâdâd We now turned up the hills to north, and at 9 30 took angles from point C, at 9 50 came on hill in Wâdy Sûr, passed to east till, at 10 36, we stood on the watershed separating Wâdy al Mahâfeh from Wâdy Jaryah Left 10 40, and at 11 2 came on extensive ruins of a fortified town, called Khŭrbet Sûr These buildings occupy a shallow valley on the hill, and a crenelated wall runs round them. Left at 11 20 To our south-west we were told of a large cave in side of hill at 12 15 came to brow of ridge to east, and in five minutes got down to the ruins of Arak al Emîr Thermometer in shade was here 94° Fahr

'Photographs Nos 295—299 were taken of the ruins, and a ground-plan made of the palace, in the evening, observations were made from a ruin on crest of hill to west

'*July 20th*—Our camp was delightfully placed below Arak al Emîr, near the stream of Wâdy Seir, and the thermometer registered a minimum of 53° Fah during the night, by 7 a m, however, it had mounted up again to 87° Fahr Took some more measurements at the palace (see Photographs), bearing of front wall 160°, and left at 8 15 a m Near here the Wâdies Seir, Bahâr, N'aûr, and abu Ainein, come together, and are called Wâdy Hâdâd Went up hill to east until 8 40 To our west was a ruin, Ŭm al Medâris; left at 9 a m, 9 38 crossed Wâdy Behâr, near junction of three wâdies, there is here a great stream of water 18 feet wide and 2 feet deep, and oleanders fringe the bank, up the sides of the brown hill are bright green lines, showing that many streams of water are oozing out We

* Sketches were made of all the ruins visited, and are as yet unpublished

now ascend the hills to south, separating the waters going to Kafcrein from those passing from Hesban to Ar Ram, and at 10 10 stood on Jebl Zabûd Close by was the 'ain of Nini on right, at 10 45 got to top of Jebl Zabûd, left 11 10, and turning south down a wâdy, came at noon upon Wâdy Hesban, and in five minutes to the 'ain of the same name

'This fountain is a delightful spot (see Photograph No 300), a great volume of water rushing straight out of the side of the rock, which is a limestone conglomerate The wâdy through which the stream flows is about 50 yards broad at bottom, and nearly flat, having once been cultivated, and here the cattle for miles round come to be watered, and all through the day they are passing by.

'Soon after noon we went down the wâdy, and in seven minutes came on the Benâjet Sakr, a great khan belonging to the Adwan, which they say they built when Ibrahim Pasha ordered them to live in houses, but it is now a ruin Round about are Shunet and some other modern buildings, on the walls are scratched several Arabic fantasia We made our way up Wâdy Bûweib on the south bank to Hesban, which is greatly elevated, and from whence there is an extensive view over the Belka to south There are ruins here in great confusion I observed some Attic bases of columns, and four columns side by side, the stone is soft, and appears to be *malaki* diameter of column, 2 feet 6 inches

'The Bedouins began to flock around us, and threaten us if we did not give them backshish, we had only two of our guard with us, and these got frightened and said they must go By asking the people absurd questions about the sheep they ought to kill for us, etc, we diverted their attention, and got together and in order, and got away without a row

'I think it probable that with a little search some Greek inscriptions would be found about the ruins of Hesban, there are also caves about, which we were told were cut into tombs and houses It was rather unfortunate that it should have happened just then to be in the hands of a hostile party We left at 5 p m, and got to bottom of wâdy at 6, crossed over to observe with theodolite from opposite hill at sunset

'*Sunday, 21st*—Thermometer minimum in night, 75° Fahr, maximum in shade in day, 96° Walked up the Wâdy Hesban till I came on the Belka, where I found the Bedouins shovelling grain into a hole in the rock, slipped down into it to examine it, and found it to be a simple cave plastered round, quite full of grain, except 3 feet at the top The Bedouins tell a story about these granaries, they say that when the grain is inside and the door is shut, a foul air arises from it, and no man can enter until the stone door has been left open some days; consequently it is not necessary to have a guard always there, but they send one up occasionally to see that the stone has not been removed If this be true, it is quite evident that a sudden raid upon the granaries of another tribe would be of no use, as they could not enter, and this may account for the corn being put in such queer out-of-the-way unprotected spots.

'*22nd*—Took some angles, and left 'Ain Hesban at 7 3, took our course down the wâdy to west on left bank On our way we were told that Wâdy Hesban joins Wâdy Kafcrein about an hour before reaching the Jordan 7 45—Shunet as Sakr, passed patches of tobacco, melons and cucumbers, and long dry grass, flocks of blue pigeons whirling about overhead, and some human skulls lying about on the ground, one of which was picked up and forwarded to London 7 58—Passed on our left Wâdy Bûweib and the road leading up to Hesban, left 8 7, continued to west down Wady Hesban, and at 8 20 mouth of Wâdy Ahfdheil To west of this about 100 yards is a huge block of rock, scarped by nature to a height of 30 to 40 feet, no inscription on it could be seen. We now came in sight of the Jordan.

'8 30 —A bend in wâdy and a large open space with ruins of mills, the wâdy becomes a foaming torrent closed in by rocky banks

'8 35 —Passed a spring at Dûwarideh, and to the left, somewhat up the hill, a house or castle in ruins, left 8 40, in five minutes came on another 'ain of same name, issuing from the limestone rock among fig-trees, left at 8 56 We turned up the hills to left, and getting into rough ground, the lime gave way to sandstone, at 9 45 we dismounted, and left our horses, and passed along a narrow causeway, and in a few minutes came upon a spur of a hill rising in a little peak Here are the remains of a castle named Kul'at umm abu 'l hussein, from it is an extensive view of the north end of Dead Sea and lower end of the Ghor, it seems probable that it once guarded the road leading from Ar Ram to Hesban

'This peak is of sandstone of the most gorgeous colours, streaked here and there red, purple, blue, and yellow, then again it appears to have been vitrified and burnt black, and again there appear to be pieces of scoria about several specimens have been sent home There are several large caves cut out of the rock, some of them 30 feet square Down below us, about 300 feet, was the Wâdy Hesban, now become a series of cataracts, and apparently falling due west to the Ghor We left at 10 30, and 10 40 mounted our horses and went up Wâdy Hassein to south, up hill, and across Wâdy Mushkâi, along western side of a hill, and crossed a plain where were some graves, then over a place broken up by dry watercourses, and at 12 20 passed Wâdy Mûsa, at 12 27 arrived in camp at Ayûn Mûsa Left at 3 55 p m, and passing up hill to south stood on the ruins of the town of Neba at 4 17 This, together with Jebl Neba and Ayûn Mûsa, is described at the end of this paper From the ruin we could see to north, in a wâdy, a great heap of stones called al Khaloah, looking in the distance very like Stonehenge, but Goblan assured me they were only rocks which had been rent by an earthquake and left standing on end, and it being out of his programme, I could not get the exact position, having only one angle to them, probably they are on the south bank of Wâdy Hesban Returned to camp after sunset

'*July 23rd*—Started 8 a m up Wâdy Mûsa, and at 8 30 got on heights of Belka, went south-east, and at 8 35 came on a small ruin to left and mound to right ground partially under cultivation, and patches of Indian corn about, passed an extensive Arab encampment of another tribe 8 55, a little ruin on right, al Lisrâ, and ½ mile in front of us al Kafein. 9 10, ruins (they said, of Christians), the stones here are a conglomerate. near here was a great millstone 9 feet 6 inches in diameter and 16 inches thick, apparently for crushing olives, but there was not an olive-tree within some miles We now turned south over a splendid plain, and at 9 50 passed a footprint cut on the rock called al Turkmaniyeh At 10 5 Madiyaba was on our left, two miles off, in hollow; and at 10 27 we came to Tel al Massiâj, a ruin on hill left 10 40 At 11 15 we arrived at Mâ'ain, here are very extensive ruins, and the country is much under cultivation, harvesting was now going on Half mile to our south-east was another large ruin, al Um Russûs: at this place a Nabathean inscription has been found, copy of which has been forwarded As we wished to go down and photograph the Zerka Mâ'ain, we had to go through the ceremony of being given over to the sheikh of this part of the country, and Goblan had to remain behind We went to a ruin about ½ mile to south, from which photograph No 303 was taken from here we could see very plainly the ruins of Makhaur (Machærus) on Jebl Atrûd, where we were told there was very much to be seen there were also several towers dotted about We left at 1 30, cantered on, and passed footprint at 2 40, and Christian ruins at 2 50, and mounted Jebl Neba at 3 25

left 3 35 for camp, and took photographs Nos 301 of the Ayun and 302 of the town of Neba

'Goblan could not show us some of the ruins on the plain on account of hostile Bedouins

'*July 24th*.—We were disturbed last night by some bullets whizzing past our tents, and then a skirmish taking place the noise in a short time faded away in the distance, and on looking out we found we were the sole inmates of the camp, for all our Bedouins had given chase down the wâdy after some black men of Lower Ghor on the Dead Sea, who were unfriendly with the Adwân, and had made an attack upon them Goblan said he must leave next morning

'Left at 6 50 a.m Ayun Mûsa, and passed up Wâdy abu 'Neml, at 7 25 took angles, passed a few scattered terebinths, and then passed to east up Wâdy Kar'n Kebsh at 7 35, 7 50 came on watershed on Belka At 8 5 mounted Jebl Mashkar, where are ruins, and another one, Abu Abdallah, on south. We could also see Umm al Amûd, a large hill or mound on plain, at 8 20 passed on left a little hill, Tel al Arish, and going east, at 8 35, Rajm Asrîrah, the remains of a tower 30 feet square, stones 3 feet by 4 feet by 3 feet, at 8 50 came on Sawwâneh, a flinty hill, took angles, and left 9 5 Close by was al Batm, a small ruin; to our right was a hill and ruin, Howareh, and now we went towards Hesban At 9 15 saw a man waving his hand and beckoning to us, and on going up to him recognised the hotel cook, who had come over to visit his brother At 9 25 came on east side of Hesban here is a pool 144 feet long by 135 feet and 10 feet deep We now passed up wâdy to Al 'Âl at 10.10 There is little of interest here, one solitary column stands amid a heap of stones, many tanks, with circular opening

'10 55.—Began now to descend a wâdy to east, and passed on right a line of rock 15 feet high, with an opening, at 11 passed near ruin Manha, and came to al Burkeh, some vats cut in rock, for collecting the juice of grapes, apparently, for two days Goblan had talked about the pools near Hesban, and they ended in these vats, left 11 10, the rocks here horizontal, 11 25 came to Beit Zura'at, and 11 30 Umm al Hanafish, here is a building 41 feet 9 inches by 34 feet of bevelled stones, with loop holes, stones 13 inches high, 3 feet 9 inches long, and 1 foot 8 inches thick, sandstone

'At top of hill are very extensive ruins Left at 12 noon We now went nearly north through ruins, among which in many places were to be seen pointed arches based on earlier material, passed along an old road 80 feet wide, and then among some cutting in rock as if for tombs, at 12 45 Abu Nakleh, an extensive ruin on a hill, with other ruins scattered round, left 2 30, and at 2 35 passed a ruin, Bakâ'ath, and also a cistern with water In front of us was a large clump of fir-trees called As Snoberat; at 3 5 came to watershed, and passing down a wâdy running to west, came on 'Ain Nâûr at 3 25 p.m The rocks about here are chalky

'*July 25th*.—Wâdy Nâûr flows north of Khŭrbet en Nîm into Wady al Bahar, according to the testimony of several independent witnesses, both Van de Velde and Tristram ("Land of Israel," p 534) place it as running into Wâdy Hesban

'Our camp was in the wâdy near the ruins of Nâûr, but we did not see them, we were close to the little 'ain, which at this time of year is a trickling rill, oozing from several crevices in the rock, and getting lost after it has gone a few feet down the valley Below us the bed of the channel opened into a small glade We could get no view to any extent about here, not even from Jebl Naûr, which, unfortunately for observations, is covered with trees like the terebinth.

'We started at 7 5 a m up the wâdy, and shortly came on another 'ain and some cut rocks to our right

'At 7 35 we were at the foot of a hill on right side of wâdy, called al Awâly it rises to about 100 feet above the surrounding country, and the view from it should be magnificent, it happened to be hazy, but as it was I took a round of angles with the theodolite to more than forty places, among others to Neby Samwîl, Dome of the Rock, Frank Mountain, and Neby Hûsha Tahîn was very conspicuous, it rises in such an artificial looking lump

'It may be observed that the country about here is not hilly or mountainous, but is rather a succession of nearly horizontal plains intersected and cut up by deep wâdies and ravines The consequence of this is that from the few hills that are elevated at all above the levels of the plains, very extensive views can be obtained, but they are often marred by the growth of trees or scrub upon the summits, thus I have found a difficulty on one or two hills in observing, on account of the height of the underwood This of course could be readily obviated in a systematic survey, but in a reconnaissance it is a grave hindrance

'The top of Al Awâly is a sort of saddle about ½ mile long and 100 yards wide, strewed with ruined buildings, apparently of a large village Left at 9 7 a m Continued up the wâdy till 9 22 a m, when we came on Umm as Samâk, a hill on which are most extensive ruins, all in confusion Here are columns, pedestals, and capitals lumbering the ground, and no idea of the ground-plan of the temples or public buildings of which they formed part could be obtained during the short time we were able to examine them

'Some of the capitals are Corinthian, there are a great many pilasters about, and the pedestal appears to be peculiar to this country, it consists of a very large torus quirked between two platbands

'A very large pedestal of the same kind has been lately dug up at the Convent of the Sisters of Sion at Jerusalem, and is now to be seen in the chapel attached to that establishment

'We had now arrived in a very remarkable piece of country Over a tract 4 miles square there is a never ending succession of ruins On each spur there appears to have been a village, on each hill top a temple or public building, in 1 square mile I have shown six of these on the plan, but I could not put a fifth of them in, they seemed to turn up in every direction. This tract appears to have been more like one large town than anything else, and yet there is at present very little water here, it is, however, a portion which most decidedly merits a more lengthened visit than I was able to afford it, for in names alone it is most rich It does not appear that this part has been visited by any European before A great portion of the masonry is no doubt Roman, but there is a good deal which appears to be older

'At Umm as Samâk there are some semicircular arches over cisterns We left at 9 47, and saw to our south a hill apparently pierced with many caves, one of these is in the first chamber a sort of columbarium, having rows of pigeon holes round the wall about 7½ inches wide, and 10 inches high, and 2 inches to 4 inches deep, the chamber is nearly circular In the inner chamber are fifteen loculi In five minutes came on ruin of Banayet, No 1, there are three of same name.

'Banayet No 2, a ruin of no great size Passing the mouth of a wâdy to the right, we came on the remains of a Roman road Corporal Phillips went over to examine a cave inside of cleft to right, he reported it to be excavated in the rock, nearly circular on

plan, about 10 feet in diameter, and that there were a few sarcophagi about, and some columns

'10 40 came to point A, from which observations were taken, and at 10 45 a ruin from which was a good view of the plain to south left at 10 52 At 11 a.m. on top of hill at a ruin, Amâry, and at 11 12 at our camp about a mile farther on to south in valley There was no spring of water here, only a cistern with water of a disagreeable taste, but Goblan said it was the only place about here that he could encamp We were, in fact, just on the borders of the neutral ground between the Adwân and some tributary of the Beni Skho., the ground itself was well defined, for it was black with fire, the hostile tribe having burnt it when they left some weeks before, so that the Adwân might make no use of it these people were now back again, and camped a few miles from us A great part of the country we had traversed to-day was covered with heather and few trees A glance at the map (XLIX) will show that we were now on one of the highest portions of the country to east of Jordan, close to the watershed of the northern and southern Zerkas and Wâdy Nâûr, it is elevated perhaps 300 feet above the southern Belka, and it is intersected by shallow wâdies We left camp at 1 30 p.m. Goblan was very mysterious about a black stone on a hill, and showed it me as a great treasure, it is 5 feet long, 2 feet 6 inches high, and about 2 feet 6 inches wide, and it is stepped down at one end I could not understand for what it had been used, but there was nothing very remarkable about it

'We now passed another ruin, also called Amâry (it is the name of a district, and there are three ruins in it), at 1 53 p.m., and passing down a small wâdy to east, found Khûrbet es Sûk to our east, Jahrah to our right The former must have been a place of considerable importance, for it is a vast ruin In the valley are the remains of a temple 81 feet in length and 66 feet in breadth, lying east and west, entrance to east inside there are two rows of Ionic columns, 2 feet 10 inches in diameter, they are 26 feet apart, and 19 feet 6 inches from centres to side walls, the capitals appear to have been very handsome, the bases could not be seen, Saracenic arches obscure much of this temple and confuse the plan (See Photograph 304)

'Further to east is a mausoleum, entrance to west, its length is 41 feet, and breadth 39 feet, there are two sarcophagi or washing troughs close to the entrance, the roof has fallen in (Photograph 305), height about 9 feet. To the north, up the hill, there is a great extent of ruins, and on a little knoll on the summit a little platform 36 feet by 27 feet (see Photograph 306), entrance to east, round the sides are sarcophagi, or perhaps troughs, with the mouldings so common to this part of the country this latter place has probably once been under cover, as in front was found what appears to be a portion of a pediment and a sculptured frieze of the Corinthian order, in front is a tank 31 feet east to west, and 26 feet north to south, it has piers built up the length connected by arches, and then vaults are thrown over, the span of one 19 feet, of the other 6½ feet, the object of this was not discovered, the cistern is cut in the rock.

'We left at 4 40 p.m., passed Rejm Moyts, and then Rejm Howith, in five minutes, Jazûr, near camp, and Fazâza the Bedouins here are called Sh'kâra We saw on our way platforms flagged and raised on vaults, also a black stone 4 feet long by 1 foot 10 inches wide, with a border; inside, the remains of an inscription, which did not appear to be Greek or Latin, it is nearly effaced

'*July 26th*.—This morning Goblan was to redeem his promise of taking us to the bridge of which he had talked incessantly before we came in the neighbourhood of it, but now

something had evidently gone wrong, and he would not say where he was going to take us One reason perhaps was that he had fallen out with his men, and only thirteen would go with us to day. Apparently there was some breach of etiquette in going in this manner, without leave, into the land of another tribe, and several of the Adwân did not approve of it At 7 a m we started, our men armed to the teeth, and apparently ready for a skirmish if one became inevitable

'We passed some Bedouin tents of shepherds, the women were spinning from camels' hair We turned down a wâdy running south, and saw a ruin on a knoll to our left, reached it at 7 55; Alyadûdeh 100 feet square There are here the remains of a building with bevelled stones and a circular arch, a small tower 12 feet by 20 feet, also some more modern pointed arches, and several caves used as tombs. left at 8 10 a m We had passed over the burnt up neutral ground, and now came across a vast number of tents sixty in one encampment were counted, and some smaller encampments, but the fighting men were absent, only shepherds and women were about

'We now could observe that the hill Samach juts out to the south like an advanced work into the plain We were fairly in the southern Belka, which is here called Sahlet Mahlâ on our right we passed the ruins of Mahlâ at 8 45 a m and again on our right those of Burazîm shortly after

'Goblan was now quite disagreeable, and wanted to know why he should give the name of each place so many times over It was useless for me to explain that after having seen one side of a hill, one could not tell it again from every other direction, so I left him alone, and tried some other men, and found that their knowledge of the country was in no way to be compared to that of Sheikh Goblan, and I think it probable that his position is as much due to his superior knowledge and power of observation as to his prowess in the field As we jogged along, looking at the Arabs on their horses curveting about, and practising with the lance, six gazelles started up, and there was a fruitless skurry after them, which partially took off Goblan's bad humour, and he became more sensible for the remainder of the day At 9 5 we came on the conspicuous tel, Umm al 'Amûd, which can be seen for miles round, though it only rises a few feet above the plain The ruin is about 100 yards square, and about it the ground is most fertile and partially cultivated On some of the lintels lying about are plain mouldings, but otherwise there is little but cut stone to be seen Took a round of angles to south-west, a black point Rajm Salîm, Shihan, a mountain two days off, of the black stone which is made into mill stones

'As Sûwakeh, a hill behind Ziza, a ruin with two towers very conspicuous Zumlet al Alia, a long hill, and Deir umm Shitta or Setthâ in front of it Left at 9 55, and went fast over the plain to Aljabâyahât, at 10 20 a ruin, here ground appears lately to have been disturbed, as if the stones had been carried away. The hill seems artificial Observed, and left at 10 53.

'This was the most south-easterly point we were able to reach, for Goblan now said he could not undertake to show me the bridge, and so we went north-west towards Samak, for he said the tribe was coming up from the east with whom they were at variance, and the huge camp we had passed belonged to the shepherds in advance At 11 a m we passed Wâdy Mâhala, and now Goblan became quite himself again, as he considered all danger had passed We here passed sixty-four camels browsing At 11 20 passed ruins of Mahla and ascended Samak (11 40), which is about 600 feet above the plain. A cairn of stones on top, and some ruins, it is a long hill stretching to north east, left at 12 8 p m 12 30 passed Umm al

Khamâsh again, and went along south of wâdy towards Tahîn 1 p.m. passed ruin on left, which we observed to from Sumak, and arrived at camp at 1 15, after a smart trot. The daily range of thermometer was now over 40°. This afternoon a troop of loose horses galloped over our camp and broke the wet-bulb thermometer. Left camp at 3 p.m., and visited and measured tanks at Khŭrbet Suk already described.

'*August 22nd*.—Took observations from 'Amâry. Left at 5 5 a.m., and rode to Khŭrbet as Suk, where there were still some measurements to take, and some photographing to be done, as two of the dry plates the day before yesterday had failed.

'Left at 7 25, and shaped our course to north over an undulating country, with wâdies only faintly impressed. Passed the Merj al Hamâm, and the Arak of ditto, and at 7 55 came on a ruin of same name lying on north side of a wâdy. Took angles and left at 8 5. We now kept a little to the east of north, over an elevated ridge, which proved to be the watershed of the country, and then followed the east side of a wâdy until we reached Tahîn. The wâdies here, in place of running south to the Zerka Mâ'ain, all run north to the northern Zerka. To our west were two ruins called Mukâbalin on the west side of wâdy: here is the watershed separating the two Zerkas and Wady Nâûr, and the name probably arises from their meeting together. Tahîn is an artificial mound on two terraces, and though of no great altitude, is very conspicuous for miles round on account of its shape. A strong wind was blowing at the top, but a round of angles were taken.

'We were now on a large elevated plain lying due south of 'Amman, which could not be seen. A vast number of ruins were scattered about here and also on the plain to the north of 'Amman. To our east and west, hills intercepted our view. Several of the places have the prefix of thoghret on account of their standing on a watershed. To our south-east were ruins Thoghret Tusera, and Thoghret Tasîn, and to north Thoghret umm Ramadân. We left at 9 20, and made our way to north-east to al Kawassimeh at 11 5. This is a mausoleum standing on the foot to west of range of hills. It measures 25 feet square on outside, the entrance is to north, and the space inside 18 feet 3 inches by 14 feet 3 inches, the walls to east and west being thick to support the vaulted roof. (See Photograph No. 307, and plan and section.) Inside, a bench runs round to support stone sarcophagi. These are 7 feet long by 2 feet 6 inches on outside. A cornice runs round at the springing of the arch. The people are a tribe of the Skhûr Bedouins, friendly, but not connected with the Adwân, and they objected to our using the dark tent, as they said we were charming the treasure away. They were anxious to stone Corporal Phillips as a magician, and we had some difficulty in restraining them.

'We left at 10 50, and passed the ruins of a large village, and the old road from Khŭrbet as Sûk to 'Amman, and going north-west came on Assawâwîn at 11 5. A large ruin here, took angles and left at 11 15, going to north, the rock lying horizontal. We now passed a place called Arâk 'Aisheh, where the rock is scarped and cut in steps for some distance, and passing across wâdy of same name arrived at al Muntâr 'Amman, the watchtower of 'Amman, 11 45. Here are the remains of a mausoleum, with two sarcophagi resting on a platform raised 6 feet above the ground. Some mouldings are lying about. Left at 12 noon, and at 12 5 reached the brow of a hill from which we caught our first view of 'Amman, about 1,300 feet below us. We reached the bottom in a few minutes, and found our tents pitched opposite to the great theatre. Positions were selected for the camera, and during the next three days fifteen negatives were taken of ruins of interest.

'*August 29th*.—Left at 7 45 a.m. down the wâdy of 'Amman, 8 a.m. at point A, and in

five minutes turned up a wâdy to south, the ruin of Mûrmûr on our left, reached it at 8 20, took angles, and left at 8 35, continued on spur of hill till we reached the ruin of Markab, 8 45, took angles, and left 8 57, from here we saw another ruin, south-east, Kuryet al Markab, at 9 10 reached top of hill, where is a square tower with large stones Left 9 30, went south, and at 9 45 passed tower on left and ruin on hill on right, all called by same name at 9 55 got on to high hill, part of ridge running north and south, which forms a watershed Point D from here Wâdies Katâr and al Kâfeh are seen to run east Could see in the distance to east Jebl Zimlet al Adam, and to north of it Jebl Nawâsif, descended at 10 10 to south, and at 10 20 came across an old Roman road, and 10 45 a ruin near it, at 10.50 the cave or tomb of Umm Kâf on side of hill looking south. Plan section and elevation of this tomb have been forwarded The engaged columns, cut out of the rock, have Corinthian capitals The interior has been used a second time by Saracens, there are ruins strewing the ground all round, and several sarcophagi, not far from us to east was to be seen the Haj route from Damascus We had passed by several clumps of trees, but farther east there appears to stretch a great plain Left at 1 30, turned to north-west, and passed some rectangular holes cut in rock at 1 40, and 1 55 another ruin, and at 2 13 arrived at Kawassimeh, continued to north, and at 2 35 passed Rajm Muttaba, and at 2 40 the ruins of Khûrbet Mansiyeh Left at 2 45, and arrived at camp 3 p m.

'Amman

'This is fully described by Buckhardt, De Saulcy, Murray's Guide, and Tristram

'It must, however, be very different in summer to what it is in winter There was now nothing offensive about the place, as the cattle only came down to the wâdy to drink, and otherwise remained in the plains above A plan was made of the tower and castle above, and also of some of the buildings The building called a church or cathedral in most books appears to me to have been a mosque, it is very similar in construction to the mosques elsewhere

'Some masons' marks were seen on the stones of an arch which had fallen near the junction of the two wâdies near the "public promenade"

'Thirteen photographs have been taken

'*August* 1*st* (*Thursday*)—Left camp at 7 15 a m, and went up Wâdy Hadâdeh to north-west, passing the north front of the castle of 'Amman 7 50 took angles from point A.

'8.5 arrived at Khŭrbet Hadâdeh, a small ruin on hill, took angles and left at 8 15 8 25 came on another ruin of same name to north-west, and 8.30 to a ruin (name unknown) on east side of wâdy 8 40 Khŭrbet Urjan, took a round of angles and left 9 5 We had been moving north up the wâdy We now continued east along the hill-top till we reached a ruin at Jaranîn, angles taken, and we left 9 40; we now turned north-west, passing er Rawâk on a spur at 9 45, at 10 10 we reached a high hill, Bukeh, from whence we had a good view in all directions, but especially to north The mountains of Ajlûn could be seen, and the guide pointed out Jarash, but I could not distinguish it, and am not certain that he could The bearing, however, to the place to which he pointed is 354°, and is very nearly the bearing of Jarash from this point on my plan. I mention this because it would be an important line to obtain when the survey is commenced I also observed to some places to east which were not visited—viz, Dhahret el Muktâ, Rajm ash Shuk, and al Kâû There is also a ruin to north, about 1 mile, called Halâlâfiyeh On this hill are layers of flint and nodules

cropping out Left at 10 30 a m , and passed to west-south-west along the southern ridge of hills, and at 10 50 to our right by one mile was Aljabayahat, a ruin in valley with trees, and little farther on at 1½ miles to right Tel'at al Ali, a small hill , at 11 7 we passed Keseret 'Hograh on right, and shortly after Umm ad Dubbâ, also in valley to right , we also saw Umm as Samak (No 3), a low yellow hill to west by two miles At 11 20 we ascended the conspicuous hill of Ash Shamâsâny, from which is a most extensive view I here took angles with theodolite to more than thirty hills and ruins To the east of this a few hundred yards is a lower peaky tipped hill, very like it and without a name Our observations included angles to Al 'Aâl and Neba, of the identity of which we were not quite certain. Lunched, and left at 1 15 Continued south on spur between two wâdies To our left were two low hills called Sakrah and Kusara At 1 20 passed Shibhâ (took angles), and at 1 40 Rajm Armaga, ½ mile to left, at 11 50 es Sawâfych, ½ mile to right, turned now to east, and on our left Jahâsa, and close to it Hawâych, and at 1 55 Rajm Omar abu l'Makhâmar ; arrived at Abdun at 2 15 (a few trees here), took angles, and left at 2 40 , went south, and at 3 p m came to ruins, Rajm abu M'awaideh , to east of Abdûn was Wabideh, and in the valley some caves At 3 20 p m passed to north near Malfûf (a ruined circular tower), and then turned down Wâdy Hemar, and arrived in camp at 4 15 p m The country visited to day is nearly bare of trees, but is a mass of ruins, and the ground has in some places been terraced for miles.

'*August 2nd* (*Friday*) —Struck our tents and left at 6 50 a m , passed the head of the river of 'Amman at 7 25, and continued up the wâdy , at 7 40 passed Wâdy Hemâr, coming in on right, and Wâdy al Arnab on left , at 7 55 Wâdy Abdûn enters on right, and at 8 10 Wâdy Makabâlin on left , at 8 15 the wâdy takes the name of Shankeh, and Wady Umm al Wasset runs into it on right We followed up this latter, passing the ruins of Wasset, and 8 25 Jebl Maiseh was on our left , on our right was Jebl Hemâr, and beyond it the Wâdy Deir Akaba , at 8 50 we mounted the hill and reached Maiseh, took angles, and left at 9 15 , passed Maksar al Bakera, and in ten minutes more arrived at an Nawablisiyeh (a piece of ground in connection with Nablûs), took angles, and left at 9 30 , passed over a plain to north-west, and arrived at Khŭrbet Sar at 9 55 , there are here several ruins—the remains of a mausoleum with arches something similar to those at Khŭrbet Suk in style , also a square tower of a hard flinty stone

'We now continued to north, and Goblan said the camp of the chief of the Adwân was close by, and wanted me to pay him a visit I had several objections, but at last agreed to go for a few minutes, as Goblan said he must go He then asked me what present I had brought for Sheikh Diab I said I had nothing He proposed I should give him one of the small revolvers I had about me To this I decidedly objected He then enumerated the horses and guns that had been given to his great chief by the European visitors who had been in the country I only observed that he had bargained to take me through the country for a certain sum, and that if his chief was likely to be angry with him, he had better give him his mare , this elicited a ghastly grin, and he said no more We passed over the plain and came to the ruin and tree of Sujret al Kursey , here was the great encampment of Sheikh Diab, at that time in arms against the Government

'Most of the tents were of a larger size than usual, but there was one very long one open to the east, in which were sitting some fifty Bedouins. As we approached the old veteran came out to meet us, and gave a hearty welcome He introduced us to his son, an exceedingly handsome man of about thirty years, and also to some of the minor sheikhs, and then

plunged into a conversation about the approaching Turkish army, asking me innumerable questions as to how we managed such matters in my country. It was evidently a question whether he would submit or fight it out, for a relation of his was with the Turkish army who could act as guide in all the difficult places, as he knew the country well and all the granaries I rose to go once or twice, but coffee had not appeared, and they said I must wait for that; but after about an hour and a half I could delay no longer On my rising, Diab said he had killed a sheep for me, which already was half cooked, and so I must stay It took at least three hours, and was quite late in the day before our feast appeared We had breakfasted so early we felt famished, and tucked in with a will to the dishes of rice, sheep, butter, sweetmeats, and everything else that was put promiscuously before us, and felt no inconvenience at eating with our bread and fingers After we had finished, the assembled party set to and soon demolished the greater part of what we had left, but considerately left a little for the children, who were turned loose on the dishes, and licked them clean

'About 3 p m I said it was time for us to go, and then Goblan again asked me about a present, in front of Diab He wanted to get me to give the revolver, but in spite of the soothing effects of their hospitality, and dinner, I was able to steel myself against what I considered to be an imposition, and told Diab I had brought nothing for him, but that if I saw anything in Jerusalem when I went back that I thought he would like, I would send it to him Goblan took a small present from me to Diab on our return to Jerusalem Although the Bedouins are bound to feed one gratis by their own laws, yet I always feel a certain amount of compunction in receiving anything without giving an equivalent, because of our civilized customs, which forbid one treating them in return as hospitably as they treat us thus, when Goblan comes to see me, I can't ask him to dinner, or into the drawing-room, but give over an outhouse to his use, and supply his bed with carpets from the floor, and even the carpets I begrudge, because they have to be hung up out of doors for several days after a visit for fear of vermin having been left on them It was on that account that I did not wish to feed with Diab, for I knew that at the least it would cost three pounds sterling, and lose me half a day's work We left the old sheikh at 3 10 p m, and Goblan, with much pomp, took me to see a sculptured stone hard by It proved to be part of a stone which had been used as the mouth of a cistern, and the ropes had cut it up a good deal There was nothing remarkable about it We now came down south alongside the ridge, and winding down the side of it to west, arrived at the fountain head of Wâdy Seir at 4 p m Here was our camp We were now in a totally different country, as far to west as el Kursey and Khŭrbet Sâr, the country beyond Amman is, generally speaking, a plain with shallow wâdies, and without trees, with numerous flocks of sheep in all directions To the west of Kursey and Sâr the plain terminates and shelves down into Wâdy Seir, and now commence a series of wâdies breaking up the country into a mass of hills, these are covered densely from top to bottom with a kind of oak-tree Near our camp the Seir is joined by two other wâdies, ad Dyalâmeh and ad Dâlyeh A hill to the north is called Karm abu Sheibân, and ruins of Motul as Sîreh and Seir are close together Neither of these were seen

'I now sent Corporal Phillips down the wâdy to examine a rock tomb said to exist there, and went myself to take a round of angles from a hill to south of our camp, from hence we could see Neby Samuel and Jerusalem, but few places to north or south for longitude, and this was the constant difficulty on this side, the latitude could be got very accurately both by sextant and by reference to known points to west of Jordan, but there were few conspicuous points to north or south We returned to camp at sunset

'Corporal Phillips returned soon after dark, he had been away about two hours, and had reached the tomb after a sharp trot of forty minutes It is down the Wady Seir, and he supposed he had been close to Arak al Emir, but he saw nothing of it The rock is scarped, and there are seven windows—the four upper ones have cross-bars to them, cut out of the rock; the three below are plain There is a narrow door at the bottom, inside, the chamber is about 12 feet square, and divided into two by a wall running up the centre, there were originally three floors, of which only the two cornices now remain for supporting the joists, on the upper one pieces of wood were now resting, on which the shepherds made their beds On each floor are seven rows of pigeon-holes cut in the walls on every side, they are triangular (no measurements were taken)

'The wâdy, as far as they went, is clothed on either side by dense masses of oak, a little below the tomb a solitary olive tree was noticed

'*August 3rd* (*Saturday*) – It was necessary for us to go to Jarash before the arrival of the Turkish troops there, so we started this morning, but first I wished to connect the work with Arak al Emir again, so as to complete the circle Left camp 7 30 a m and went south, ascending the wooded hill instead of turning south-west down Wâdy Seir On getting up to top turned to south west, and at 8 20 came to Shajaret adh Dharâá, angles, close to were ruins, Khŭrbet Sâádeh and Talaát ar Rîmeh We could here see the junction of Wadies Bahâr and Eshteh Left 8 30, at 9 10 angles, passed near Khŭrbet al Fahs at 9 40, and at 9 56 Dajâjeh, passed Dubbeh, and arrived at a point overlooking Arak al Emir, took observations there with theodolite, and left at 11 20 a m, turned round now and came back by Khŭrbet Sâr, arrived 12 30 p m, and left 1 30, passed on to al Kursey, and found that Diab's camp had disappeared, Birket al Amûd at 1 55, angles, here there is a dry pond, with a pillar in centre, left 2 15 The country now changed, and we rode through fields of Dhurrah to Dabûk, still going to north, arrived 2 35, angles. Half a mile to our right was Umm ad Dubbeh.

'We were now in a forest of a kind of oak, and the soil sandy. Left at 2.50, and at 3 15 passed a ruin, after this we found our camp at 3 45

''Ain Hemar. From here as Salt is only a few hours, and I sent Corporal Birtles for letters I went up to top of hill near to observe with theodolite

'The view from these hills to the north is remarkable, 1,500 feet below us an oval depressed plain, 9 miles long and 6 broad, giving about 45 square miles of the richest meadow land It appears to be the dried up bed of a lake whose waters have cut their way to the Zerka years ago by Wâdies Umm ad Danaur and ash Shaleilh on the north-west side, it is called al Bukâa, and lies north-east and south-west There are several ruins on it, the principal being Khŭrbet al Bashâ, Ain Mûmîn, and Mukhna, the hills rise round to about 600 feet or 700 feet

'To the west a broad wâdy runs in, Wâdy Hôr, on which are the ruins of Abu Tineh, further to north east are Aljuah, Khanazîr, and al Yadzidiyeh, and on the other side of Wâdy Umm ad Danaûr is Talûz, and opposite to it on the other side of the Bukâ'a, half-way up the hills, is a ruined town called Môbus

'Below us on the side of the hill is the spring of Safût, and to east lower down a ruin of same name, and at the foot of the hill some distance to east 'Ain abu Naseir.

'*August 5th* (*Monday*)—Left camp at 7 35 a m, and gradually ascended the hill on north, till at 7 45 we stood on the ridge running east and west, which on the north side runs down steeply into the Bukâ'a, and to south falls gently to the 'ain, and causes its waters to

flow into Wâdy al Azrak, and thence to Wâdy ash Shaib Where we stood was a ruin on a flat-topped hill called ar Râha, near a conspicuous tree, Shajret al Halanaiteh, or Hayanaity, this tree has been observed to from Jebl Hûsha The ruins are formed of rough stones from the hill-side We had a fine view of the Bukâ'a, kept along the ridge to east till 8 20, took angles, and left 8 35, descended towards east till 8.55, when we reached the spring of Safût At 9 a.m. came on extensive ruins of same name The principal object remaining is a gateway 8 feet high and 7 feet 6 inches wide, with a lintel over it, called the Gate of 'Amman (see Sketch), there are bevelled stones about Near here Goblan says he has lately discovered a series of rock-cut chambers, seven in number, opening one into the other The hills we passed over were observed to have trees only on north side, probably on account of the heat of the sun In the same way in the desert of Judea, in the early spring, the hill-sides to north are green and bright with flowers, while to south they are quite brown Left at 9 10, and passed the Wâdy Safût, where is a trickling stream, the sides of which are bright with variegated sandstone Passed now to north, and at 9 50 reached al Bashâ, nearly in the centre of the plain, the remains of an extensive village or town of soft stone. There are some vaults about, the plain here is well cultivated in parts, and elsewhere swarms with flocks of sheep and goats; took angles, and left at 10 5 Kept up along west side of plain, leaving Makhna on the left, and at 10 50 arrived at Ain Mûmin, where is a large terebinth sheltering a holy spot of unhewn stones; the ploughs, etc, of the fellahin were here heaped up in safety, took angles, and left 11 25 Continued to north up a wâdy after we had passed through the plain, and arrived at Thoghret umm Ghafreh at 12 5, left at 1 0, and went down to Wâdy Rumân, with water in it, at 1 50, the country here becomes wild, the rocks perpendicular in some places.

'At 2 20 came to 'Ain umm Rabia, and at 2 35 passed between the hills Mustâba and Asnâmeh from here we could see Jarash very plainly left at 2 50, and descended rapidly to Wâdy az Zarka, where we found our camp at 4 20 p m Here the Rev W Baily joined us from As Salt

'The Zarka is here a rapid muddy stream lined with rushes, flags, and oleanders, so that the water can only be seen here and there there are several tributaries from the northern side, among others Wâdy Yarta tumbles in a vast amount of water there are several ruined mills about The valley here is about 100 yards wide, with a nearly level space at bottom. The heat was excessive

'*August 6th*—Left at 7 15 a.m, and ascended the hills to north, and passed ruins at 7 22, left 7 32 on our left was a hill, Mejdel, there is another Mejdel several miles farther to west, near Hemta 7 45, arrived at a ruin al Ghazâl, and at hill of same name 8 17

'Left 8 30, and arrived at Jerash at 9 30 a m On our right was a conspicuous hill called Mazâr, with a wely on it

'On our arrival we found a party of Fellahin from Sûf waiting to take us on, as they had heard of us, and supposed we were going north As the Adwân dare not remain openly at Jerash, we were put partially under the care of these people, but sometimes we were left without any guard at all Goblan used to come back at nights and stay a short time At this time the troops were a very short distance from Jerash, probably less than four hours

'I had not with me the works of Burckhardt and Buckingham, which I regretted very much at the time, as their plans would have helped me to distinguish ruins which no doubt are now very much more damaged than they were fifty years ago We spent nearly three days at Jerash itself, and, though we were at work from sunrise to sunset, there still remained

much to do when we left The plan of the town and detail plans of the buildings I forwarded home in November, 1868 For the general plan, two lines were measured from the bath-house to the Temple of the Sun, and from thence to the small temple From the two first points rounds of angles were taken with the theodolite, and the work was plotted on the two lines The bearing of each side of the city wall was taken with prismatic compass, and also angles from some prominent points With the exception of just round the small theatre the work plotted very well, at this point it is a difficulty to see where the city wall originally lay

'See general plan, northern theatre front to north

'2 Temple of Jupiter, plan $\frac{1}{500}$

'3 Southern temple, plan $\frac{1}{500}$

'4 Triumphal archway, $\frac{1}{500}$

'5 Southern theatre, with details

'6 Pedestal at cross streets

'7. Ruined Khan on east side of river

'Seventeen inscriptions were found, of which only five or six appear to have previously been published

'Two of them are very long ones and are nearly perfect Six of them are the inscriptions over the gate of the Propyleum, three of these were exhumed by our party from under the ruins

'The photographs are thirteen in number, and taken of the most important objects

'Corporal Phillips experienced great difficulty in his work on account of the heat, which caused his bath to split up he lost one day's work through this

'No. 323 Views of northern theatre from north, with columns of Temple of Jupiter behind

" 324 View from near the bath-house, looking south

" 325 View of street from near bath-house, looking north

" 326 West side of street south of the Propyleum of Temple of Jupiter

" 327 Propyleum of Temple of Jupiter among the fallen voussoirs were found the inscriptions

" 328 Columns of Temple of Jupiter or of the Sun

" 329 View from southern end of Forum, showing street and Temple of Jupiter in distance

" 330 Southern theatre, view looking west

" 331 Triumphal arch, south side

" 332 Bridge and large Khan

" 333 Southern Temple, view looking south-east

" 334 Oval of columns (Forum) at south end of street

" 335 Inside of Propyleum
To show an ugly break in the line of columns

'The caves and tombs round about were examined, but nothing remarkable was found

'The welly of Neby Hûd at Mezâr was visited and angles taken from it it is distant fifty-five minutes from bath-house, Jerash

'So much has been written about Jerash, and there are such good accounts by Burckhardt, Buckingham, and Lindsey, that I have thought it unnecessary to do more than enumerate the plans and photographs taken

'The young sheikh of Sûf paid me a visit and wanted to take us on up the country He produced a heap of certificates, which were to the effect, "Don't trust this man, he is a rascal" It was amusing to see how anxious he was to prove that they did refer to him, though many of them must have been written before he was born He evidently prized them very highly

'*August 9th*—Goblan had left some men of Sûf to guard us, as it was not safe for him to remain With these we started, leaving the gateway of Jerash at 12 40 p m, and turned over the hills to west On our right was a ruin called Deir, and at 1 3 we arrived at a ridge, from which an angle to Jerash could be obtained The ruins of 'Alámâmy bore due south from this point Left at 1.12, and at 1 40 arrived at the ruined village of Khŭrbet Najîb. We were now in a well-cultivated country, oak-trees scattered about, with here and there a patch of olives, the vacant places being sown with corn Left at 1 40, and passing the ruins of a convent to our left, arrived at 'Ain Kitteh at 1 55, here was an abundant stream, the banks lined with water-cresses The olives about here have the same red-berried mistletoe growing on them as they have at Jerusalem We now went up by Kuryet Kitteh (probably Tekitty of Robinson's List), a village consisting of a few houses, now deserted, and wely, beyond were fig-trees laden with fruit We now continued descending till, at 2 20, we passed Wâdy Nakleh, a small stream fringed with oleanders A short distance to north were ruins of same name, further north, and up the steep wâdy, were to be seen the villages of Reimûn and Sâkibeh On crossing the wâdy we found ourselves in a wood of stone pine, covering the southern sides of the hills At 3 p m arrived at Dabîn, where were some stone olive mills, the country was carefully cultivated We had now a difficulty with our men of Sûf, they appeared to think that we were in their hands, and must go where they chose I told them to be off, and turned up the hill Hakât (?) without them It was hard work getting up, on account of the steepness of the side and the growth of underwood On reaching the summit we found it bare of trees, and commanding a fine view to the east, but to the west, it continued in a succession of small peaks, for several miles apparently, so that we had no view in that direction Nighdeh appears to be one of the western peaks This line of hills is a remarkable feature in the country, and is somewhat higher than the Jebl Hûsha range.

'A high wind was blowing at top from south-west We arrived at 3 20, took a round of angles, and left at 3 35; turned down the hill to south-west, through a park-like scenery, at 4 45 passed a ruin (Jazâzeh), and at 5 25 turned down a wâdy, which in a few minutes opened into a glade, in a vacant part of which our camp was placed Near to us was an 'Ain Kajazeh (?), on all sides we were hemmed in by trees, so that it was only with great difficulty that I could fix our position Goblan and party were waiting for us, but they were still in a state of trepidation, and wished to put the Zerka between themselves and the enemy. On telling him how badly the men of Sûf had behaved, he only expressed his astonishment that we should have been able to get rid of them without paying a high bakshish, as they have a bad reputation This seemed rather good, after his having put us under their care, and I refused to pay them a farthing, as that was Goblan's business I do not think they got much out of him

'*August 10th*—Left at 8 15 a m, went west to top of a small hill ¼ mile from camp, whence we saw the ruins of Khŭrbet Kajâzeh to south-east, and Hemta, near the hill of Mejdel (a second of the name to the west of that near Jerash), also a three-peaked hill, Dhahret al Maktal, and also beyond the Zerka, in the distance to south-east, were Tels al Haddâd and al Aâsy Left 8 45, at 9 came to point *b* on hill, from here we could see

Wadies Remin and Salahy, coming together into the Zerka from south, and farther to east, Wady Ruman Left 9 10, in five minutes came to village of Burmeh, where there are many olive trees, we had previously been passing through oaks and pines. Passed ruin of Kawar, and at 9 35 turned down a wâdy, at 9 55 reached fountain of same name, 10 a m, took angles up Wadies Rasûn, al Kareith, and al Gusneh, on southern side of Zerka Left 10 30, and at 10 55 reached the bed of the Zerka. Here a photograph (No 336) was taken of the banks of the Jabbok, with reference to Genesis xxxii

'A strong wind blowing from west.

'Left at 12 50 p m, and reached the first plateau at 1.10 p.m. To east was Wady 'Alafîny, and into it runs Wady Mashâfeh, on either side of us were the plains of Sawâlheh and Ardheh Left at 1 40, at 2 25 arrived at Jalhud, where there is a spring of water, and at 3 8, al 'Alan, a miserable village Left 3 30, and passed a fountain, at 3 50 surmounted the third terrace, where are the ruins of Dzi, and at 4 50 arrived at fourth plateau Near here is Wady Rumeimûn, and to south is Tel Mahis Arrived at camp, at wely of Jebl Husha, at 5 5 p m The country we had gone through between this and Jerash is beautifully wooded, and the atmosphere seemed quite to have changed While we were in the bare country there were no clouds above us, but directly we came among trees, we found clouds constantly forming above our heads, and shielding the sun's rays from us, and at the same time we could see there was still clear sky over the barren ground

'*August 12th*—From the summit of Jebl Hûsha there is probably the finest view in Palestine; perhaps that from Kaukaba near the Jisr Mejamia may be equal to it It was hazy yesterday, and our observations were not very extensive, but this morning we could see every point in the Ghor and opposite hills most distinctly, though many were 30 miles off Took a round of angles and left the wely at 8 43 a m Turned along the ridge of the hill south-west, and looked down on the Wâdy Hamâm, which springs at 'Abhereh, below us, and flows into the Jordan with a never failing stream Where it joins the Jordan there is (Jazireh) an island, on the western side the Wâdy Mudahdahreh falls into the Jordan below the Wady Faseil and only flows during the rains Near the Dead Sea we could see Wâdies Jerefeh and al Aâdhâm, flowing into Jordan from east Wâdies Mâhis and Azrak fall into Wady Shaib below as Salt from east Beyond as Salt to east were two hills, Jelûdy and Shajret at Tub Wâdy ad Dâris runs down the side of the Jebl Hûsha to our south towards the Jordan We left point A at 9 25, went south, and passing a Christian village, Fuheis, arrived at hills called Batanch at 11 a m Took angles and passed to east, reached a spring at 11.45, and our camp just below as Salt at 12 10, it was pitched close to an 'Ain of Jadûr Near us was a ruined church of St George, Kaniset Sarah We went and took a round of observations with theodolite from castle Photographs Nos 339 and 340 were taken of the town, and No 338, of a flock of goats near the 'ain waiting ready to be watered, and crouching under the shade of rocks from the mid day sun

'*August 13th*—Left at 8 a m Went down Wâdy Shaib at 8 27, passed a gully to our right, and at 8 30 'Ain Jazir, passed some triangular caves or cuttings in the rock, and 8 40, Khûrbet Sûk to our right At 8 43 the ruins of Jazir were on our left, and beyond, up the Wady al Azrak, the bridge Khaidhar, and ruin of Abu Târik, also hills al Ghundeh and Um Aâwyeh, passed Wady Hayreh and turned over the hills to the east, and then descended to bottom of Wady Maheis After ascending 600 feet, we arrived at the 'Ain Maheis, from here there is a beautiful view of Dead Sea, and up the Ghor as far as Agarab Left at 10 40, came round to west by Bir as Sabil, took angles from point C at 11 30, and at 12 15 arrived

at Fuheis, left at 1 20, and passing through a dense forest of oak, descended to our camp at Thoghret as Sujûn at 2 50 p m

'We had passed through a lovely country after leaving Wâdy Shaib, through groves of oak-trees with enormous acorns, plenty of water and flocks of goats in every direction We had passed a good deal through a sandstone formation on which trees appear to flourish Our camp was on a thoghret from which one wâdy ran direct to north-west into Wâdy Shaib, the other ran down to south of it, and parallel We had heard volleys of musketry during the day to our east, and Goblan getting anxious, got leave to go and see about it

'*August 14th* —I had a difficulty with the sheikh who was left in charge by Goblan He came into my tent and sat down quite at his ease, and would not take any hint, so he had to be shoved outside he then had a row with the dragoman

'Started at 6 30 a.m, down along the left bank of Wady al Idzam, which runs into the Kaferein, near Hilâly On our right were two hills on either side of the wâdy, close to us on left bank Talaat Rîmeh, and on right bank Arkub al Khatal We soon left behind us the forest of oak, and rode among tall thistles 6 to 7 feet high At 7 5 got into the plain of Emîr (point A), and at 7 30 reached 'Ain Jeryah, where we found Goblan and some of his party waiting for us Left at 7 40 and passed down wâdy of same name, crossed it at 8 15, and began to ascend some bare hills to south, and at 8 40 Hilâly bore due east We now descended a wâdy very gently, and at 9 10 found ourselves in Wâdy Hadâr, and at 9 20 reached the mouth opposite to Tel Kaferein Arrived at a place fixed on for our camp at 10 a m Continued on to south, passing Ar Ram, where a round of angles was taken from the sheikh's tomb, which surmounts the artificial mound We now passed through irrigated fields till we crossed Wâdy Aâdham, and reached Suwaimeh at 11 45 The 'ain keeps up a steady flow of rather brackish water throughout the year, the ruins are some 300 yards to the west, and appear to be of no importance Left at 1 20 p m, at 2 10 crossed into watered country, at 3 10 passed Ar Ram, and soon after came on a camp of the black inhabitants, who insisted on our dismounting and drinking leban

'In the afternoon angles were taken with theodolite from a spur on the hill-side south-east of Tel Kaferein. Goblan did not like to start till it was well dark We left at 8 20 p m, and as there was no moon our cavalcade was somewhat solemn At 10 55 we arrived at the Nuwaimeh ford, and got all over by 11 43 We could not pass by ei Riha, as there was a small army from Jerusalem encamped there, to support those on other side, so we made our way to 'Ain Hajlâ, passed Wâdy Kelt at 1 a m, and arrived at the 'ain 1 30 a m

'There was no time to pitch our tents, so after getting some food we lay on the ground and were up at 4 a m, in time to take a round of angles at sunrise Left at 6 50, and arrived at Dead Sea at 8 15, spent some time in looking for the survey bench mark, which had become buried in sand, and arrived in Jerusalem in the evening'— 'Quarterly Statement,' 1869, pp 284—306

ACCOUNT OF 'AYÛN MÛSA, JANUARY 2, 1869

'*Neba*—Robinson, in his list of places in el Belka, south of es Salt, gives "Nebo (Nebo?)"

'M de Saulcy appears to have been the first to discover the site of Neba, on 13th April, 1863; (see "Voyage en Terre Sainte," p 289) When passing over the Belka, between Hesban and Ma'ain, he was pointed out "Djebel Neba" to his right, and the following day (14th April) he passed "Ayoun Mousa, Sources de Moise," at its foot.

'It appears from the plan, published in 1865, that the Duc de Luynes camped at "'Ain Mûsa" on 13th and 20th April, 1864, and that he ascended Neba, which he calls "Djebel Mûsa"

'On 30th April, 1864, only ten days after the visit of the Duc de Luynes, these springs were visited by the Rev H B Tristram, F R S, who refers to them in his speech, 11th May, 1867, at Cambridge Mr Tristram also ascended Neba, and gives a graphic description of the view from it in "The Land of Israel"

'The discovery, then, appears to have been made independently by at least two of these three gentlemen, and, to a certain extent, the results differ in detail

'M de Saulcy places the springs to the south of Neba, but, as he only *saw* Neba, and came to the springs after making a long detour round by Mâ'ain, he may easily be in error in the location of the two with reference to each other

'The Duc de Luynes places the "spring" (he calls it 'Ain) to the north of Djebel Mûsa (Neba), and Mr Tristram does not mention the two with reference to each other

'I found (22nd July, 1867) the 'Ayûn Mûsa situated in a ravine to the north-west of Neba South of the springs, and west of Jebel Neba, I found extensive ruins of the same name, they consist of a confused heap of stones, 300 yards from east to west, and 100 from north to south, lying on a spur of Jebel Neba There are scattered about the remains of several columns and cornices; also the remains of a temple, 70 feet in length, and some vaults beneath We descended into these vaults They are divided by piers 2 feet 3 inches thick, arches 16 feet span, and 6 feet rise; the arches are 1 foot thick, and are paved over with flagging 18 inches square This paved place is west of, and in some connection with, the temple We also found the appearance of a city wall The stones about were very much worn.

'In the vaults we found the remains of four women and those of some children, who had apparently been murdered and thrust down these places

'Jebel Neba is a hill (see photographs 301, 302) on the edge of the swelling ground round the west end of the Belka It can be seen from the wâdies Hesban and Keferein, and from near Tell Keferein it appears as a lumpy hill above the high lands, it is 400 feet above the ruins of Neba, and about one mile and a half distant, it is about 2,670 feet above the sea level (Mediterranean), and is therefore close on a level with the Mount of Olives

'To the north of Neba there is no hill of equal height, overlooking all the plain of the Jordan, until we come to Jebel Husha, though to the north-east the ground rises 200 feet above Neba

'From Jebel Husha to Jebel Atarus there is not a point which commands the high lands on the west of the Jordan

'In the wâdy, forming the northern boundary of the Jebel and ruins of Neba, are the

springs of Moses They gush out of the limestone rock, and are numerous, the highest and lowest differ about 100 feet in elevation, the lowest being about 1,100 feet below Jebel Neba The wâdy is a ravine broken up by precipices (see photograph No 301), the water from the springs running down in a succession of cascades of about 20 feet to 30 feet in height Several of the springs issue from small caves, where the water lies in basins 3 feet to 4 feet deep

'This wâdy can be seen from Neby Musa, on the west side of the Jordan, and as points from which you can see a distant holy place are venerated among the Mahomedans, I have to suggest the question whether this Neby may not have originally obtained its sanctity from the people having been able from that spot to see up the ravine of the Springs of Moses

'In many places on the east of the Jordan we found piles of stones marking spots from which Neby Musa could be seen

'If there happened to be one spot on the eastern bank from which Neby Musa could be seen, and if it were difficult for any number of years for the Bedouins to cross the Jordan, is it not probable that in course of time this spot would be looked upon as the true Neby?

'On this principle, in default of a better argument, may we not suppose that originally Neby Musa was the spot from which the 'Ayûn Musa could be seen, and that, when in process of time it became difficult and *inconvenient* to cross the Jordan, the Mahomedans were content to accept the shadow for the reality?'—'Quarterly Statement,' 1869

A VISIT TO THE JORDAN VALLEY

'The weather at Jerusalem and throughout the country had been very severe, and we heard that the communication (by boat) across the Jordan had been broken, but Goblan assured us that such was not the case, and insisted that he had crossed by the boat on the previous day We accordingly made our preparations, and moved down to 'Ain es Sultan on 24th February, 1868 This place is supposed to be the site of the ancient Jericho and Elisha's Fountain (2 Kings ii 19), it is about 600 feet below the Mediterranean, and 700 feet above the Dead Sea Here we remained two days starting the excavations The weather was very cold at this time, the wind from the north seemed fresh from the snows of Lebanon, and at night the thermometer fell to the freezing point, at mid-day, however, when the wind dropped, the heat was felt

'On 26th February we started for the ford at Damieh, 23 miles distant, on the direct road from Nâblus to es Salt The weather was chilly, and we wore our overcoats, but the country was green everywhere, and flowers of every hue lay in our path Passing Kurn Surtabeh and over Wâdy Fer'ah, we arrived at dusk at the ford of Damieh, and camped half-way up the bank separating the upper and lower plains of the Jordan, where we found a small space which was not quite covered with shrubs We had a fine view of the Jordan from this spot the country one mass of green, and down below us the lower Jordan plain—a great flat, covered with an early crop of corn, with here and there branches of the over-

flowing Jordan meandering through it. We thought little of these floods, and discussed our crossing in the morning.

'At daybreak, 27th, we hurried down to the water, and to our dismay found that the rope had been broken by the wood brought down by the floods, and the ferry-boat itself lay stuck in the mud some yards from its proper place. This ferry had been established about six months. The boat is in shape like a decked launch, it is about 20 feet long, and 8 feet wide, and is eminently unfitted for the work required of it. A thick rope is fastened across the river, and to this are attached the bows of the boat, and it is hauled across by lugging in the rope. This boat was made on the Jordan, but it has a keel instead of a flat bottom, and drawing nearly as many feet of water as it has beam, it is most unsafe for passing over animals, also there is a bulwark of about 2 feet in height round the deck, and no means of letting it down, and as there are no steps up or down to the boat, horses have generally to be hauled in by the legs if they will not jump, when the Jordan is at its full, the bulwarks of the boat are 4 feet above the bank, and when the Jordan is low there is a drop of 6 feet or more into the boat.

'This boat, however, bad as it was, was our only means of crossing the Jordan, for during the floods it was quite unsafe to attempt to swim. The water was running like a mill race, quite 60 yards in width. Goblan commenced his blarney with us, and we spent the whole day in making plans for getting the rope stretched across. Each hour they said the flood would go down, and each hour it appeared to rise. We were told that men were coming down from Nâblus to put things to rights, but we could hear nothing for certain, and as it was impossible to cross without the boat, we had the alternative either to go back or to try and go along the western bank of the Jordan to the north. This latter was an unknown route: we could not hear that it had ever been traversed by Europeans. We sent for the Sheikh of the Mesa'ad Arabs, who camp on Wâdy Fer'ah, and entered into an agreement with him to escort us round by Jisr Mejamia for five pounds sterling. He arranged to meet us next morning and take us on. Unfortunately, Goblan got leave to go and sup with the sheikh that evening, and a little plot against us was the result. During the night we had a storm of wind and rain, so violent that for a portion of the night we were outside the tents keeping them up, in the middle of it all our horses were driven past us, but we thought it was only to get shelter under the hill-side.

'In the morning (28th) we got all ready to start at sunrise, but something was evidently wrong, and soon the muleteer came up to say that four horses and a mule were absent. After searching for them for an hour, we came to the conclusion that Goblan had stolen them in order to prevent our leaving the ford. We told him so, upon which he struck his breast, and talked about his honour being wounded. Goblan is not a pleasant-looking gentleman. He has a great sabre wound down one cheek and on one wrist, but these he keeps concealed: he never shows more than his nose and two eyes—one of the latter is a revolving light, he is very dark, and his eyes are bloodshot. He is quiet and gentle so long as he is not roused.

'On the east banks of the Jordan were the tents of Mustafa Agha, the Government nominee over the lower Ghor, but we had no means of telling him of our mishap. We therefore wrote a letter to the Governor of Nâblus, telling him that Goblan had stolen our horses, and asking for assistance. We had great difficulty in sending this letter, as the people insisted that the ford was not under the Governor of Nablus, and would not see that Mustafa Agha, being cut off from us, was as far as if he had been 60 miles away. Eventually we got the letter off, and then insisted that all our luggage should be mounted on the remaining

animals The head muleteer was in a frenzy about it, but nothing could induce us to believe that he was not aware of his beasts having been driven away, and our only consolation was that he had to give up his mule for the baggage and walk himself We were so overloaded that the muleteers could not find room to stow everything away, and one of them had an iron fireplace mounted on his back for the first hour We started off to meet our escort, the Sheikh of the Mesa'ad He looked rather sheepish on coming up to us, and said he supposed we understood that he wanted five pounds a day Of course we did not understand anything of the sort, and told him we would go without him Dr Chaplin told Goblan he had acted infamously towards us, but he only struck his breast in reply, and affected to be more aggrieved than any of us. We then started off north by ourselves, trusting to fortune Goblan rode after us, and tried to dissuade us from it, but to no purpose, and for a long time after, we saw him, motionless, gazing after us and meditating over his next move, for we told him we should hold him responsible for any mishap that might befall us

'We left Makrûd at 11 a m, all our baggage being packed on six mules and three donkeys, which before had required nine mules, but the animals were very much overweighted, and delayed us a good deal We had to keep round them, in skirmishing order, for fear of an attack from the Mesa'ad Arabs At noon the Jordan valley gradually began to close in, the west upper plain being about 1¼ miles wide, the plain began to be much cut up with wâdies, and we were very anxious to keep our baggage together We soon came upon a Bedouin encampment, and the dragoman was sent in with the soldier to say that the sheikh must come and escort us during the day, as we were in haste He came out in a flurry, and travelled with us the whole day Great was his astonishment, on leaving, to receive a present. The idea of travellers coming by such a road never entered his head, and he thought we were a Government party travelling by a short cut to Tiberias

'On our right we saw Jebel Ajlûn, covered with snow After passing several wâdies, of which the names are shown on the sketch, we found at 3 p m that the whole Jordan valley just here was less than 2 miles wide Our path now led over the hills, but we could see that farther north the hills come close down to the Jordan banks, the river passing through a gorge We were ascending for some hours, and quite losing sight of the Jordan, the country being much broken up with ravines

'At 5 p m we found ourselves overlooking the Jordan again, and about 1½ miles from it, to our north, a great plain extending for several miles—the plain of Beisan, we could see Beisan in the distance, and, scattered over the plain (the upper Jordan plain) were innumerable mounds and ruins We descended, crossing Wâdy Malih after its junction with Wâdy Shûk, the water flowing in a copious stream

'After traversing the plain to the north-west, we arrived at Tel Humah at 6 30 p m, where was a Bedouin camp clustered round a spring of delicious water Just before we arrived at the Tel we heard firing behind us, and on going back to see what was the matter, we found our missing beasts coming up Goblan, having failed to keep us, evidently thought it better to send them on, and the muleteers were firing away for joy at not having another day's walking before them

'The Bedouin at this camp received us kindly, and wanted us to feed with them We declined, although it was some hours before our dinner could be got ready; in the meantime we made what examination of Tel Humah we were able to do in the dark, and concluded that it was an artificial ruin Late in the evening the sheikh of the camp came to pay us a

visit, he seemed to fear that, if rains continued, the corn crop would be damaged by a worm eating at the roots

'At sunrise, on 29th February, we were off to east to visit 'Ain Sukut, a beautiful morning, the clouds hanging over the Jordan, thermometer at 5 a.m., 36° Fah. We visited the hot spring at 'Ain Sukût—air 52, water 79° 9', left at 8 30 a.m., passed 'Ain Helweh to west of Sukût, and at 9 25 another hot spring, 1½ miles from Tel Humah, water 78°.

'9 35 *a.m.*—Passed the site of an old city, near Tel Sheikh Saleh. Here we bade fare well to our yesterday's escort, giving him four dollars for his aid; he left us delighted. We kept on towards Beisan, now and then going out of the way to examine Tels and springs. This plain is wonderfully well supplied with water, the Tels we passed are shown on the sketch. Arrived at Beisan at noon, much disappointed in the ruins, but the abundance of water made the country delightful, we examined the bevelled stones in the khan on the northern side of the stream, and declined visiting some tombs on account of our being separated from our baggage. Leaving Beisan at 1 45 p.m., we passed over the hills into the plain, which again is narrow. At 3 5 p.m. passed Wâdy Shûhabeh, a rivulet with water, and, cantering on, arrived at our camp to west of Jisr Mejamia at 4 p.m. Here was another Bedouin encampment, the people of which appeared very curious about us. We started off at once to visit Kaukab, but our guide would not follow us, and at sunset we found ourselves alone close to the ruined castle, the view is magnificent reaching for miles in every direction. Kaukab will be an important point when the trigonometrical survey of Palestine is commenced. No observations were taken on this journey, except with the prismatic compass, my object being to select points for a survey at some future period.

'We paid the sheikh for Saturday's work four dollars. On Monday, 3rd March, we started off for the bridge Mejamia. Something was wrong again, and our mules were delayed, but at 8 a.m. we were all assembled at the bridge. Our new sheikh, however, refused to cross, saying he had a quarrel with the tribe on the other side, and left us under the protection of a man with a stick. The bridge Mejamia has one large pointed arch and three small ones, it is in good preservation. After passing the bridge our guide seemed to lose all confidence in his stick, and eventually disappeared, and we were again alone.

'After passing some ruins we came upon a very large Bedouin camp. We sent in the dragoman and the soldier to ask for a guide, and soon there issued out five strapping big Bedouins, armed with spears, commanded by a noble-looking sheikh, armed with a handsome sabre, silver mounted. The sheikh said he was an emir, and called himself a very great man. The Bedouin of these parts are all mounted. The sheikh is the finest specimen of a Bedouin I have yet seen. The poor fellow had a gunshot wound in his leg, which had been open for years, and he was very anxious to obtain advice about it, but quite refused to come up to Jerusalem to have it looked at. We explained to him that we did not wish him to attend us, that we only wanted one man with a spear, but he insisted on coming. The country we passed through was delightful, but the wind had changed to the south, and we felt it very hot. We lunched at Fahil, perhaps the ancient Pella, where there is much water and cultivated lands.

'About 4 p.m. our party began to get uneasy, and soon we saw rushing down upon us a troop of Bedouin, armed all with spears. We had nothing to do but try and look as if we thought it great fun. They came dashing up, with their spears lifted on high, until a few yards from us, and then one rode out and gave us a salaam. It proved to be Sheikh Arabeh, the Government nominee of Jerash, who had come down with fifteen men to look after us,

sent by Mustafa Agha After looking askance at each other for some minutes, our two parties coalesced and became friendly The Sheikh Arabeh is uncle or cousin to Sheikh Diab, the former independent head of the Adwâns Arabeh turned against his family and tribe, and led the Turkish army during the summer of 1867 into all their strongholds, and pointed out the granaries For his treachery he was rewarded with the Government command of the hill country about es Salt, but the Bedouin would have nothing to say to him, and still call Diab's son and Goblan their heads

'At sunset we had got as far down as Tel Salahat, where we camped, here are trees and cultivation, and it would have been very pleasant, but for the quantities of scorpions under every stone We gave our parties a couple of sheep for their food, and they seemed well satisfied In the morning I gave the great sheikh five dollars, all in silver He said nothing, but complained to Dr Chaplin that he was a very great man, and had been insulted—that he expected several pieces of gold, that he had only been half a day with De Saulcy, who had given him two rifles and thirty napoleons, and so on We believed a little of what he said, but it was suggested that such a great man could not think of taking anything, and that the silver was for his followers We found now that we were in the narrowest part of the Jordan valley, the hills reaching down to the river, and the plains together not being more than ½ mile in width Down towards Tel es Sa'idiyeh we saw the ground cultivated to the water's edge At 10 a m we passed over the bridge and ruin of Ferjaris The bridge was apparently an aqueduct There are four pointed arches At 10 15 a m the Jordan valley opened out into the Zerka plain, and we saw before us the wely of Abu Obeideh and the many Tels surrounding it

'We now saw the great sheikh and his men dodging about in the underwood, and we expected an attempt to secure some of our baggage. We left the soldier always in the rear to look after it Sheikh Arabeh now tried to persuade us to go up to Jerash with him, failing in that, he said we must go and stop with Mustafa Agha, who was making ready for us, finding us unwilling to do that, he insisted that we could not reach Damieh that night And soon our mules began to wander about wildly, evidently getting sly kicks from the Bedouin We pushed on through the cultivated and irrigated land between the Rajib and Zerka, at noon we reached the point where the Zerka emerges from the hills We had to pass through a hole in the rock, and then crossed the Zerka, which was here a foaming torrent As we pushed on, Arabeh still insisted we could not get to Damieh that night, and then we saw he had some object in getting us to wait About 1 p m we arrived at the open plain, south of the Zerka, and were now told that Mustafa Agha was coming to meet us Looking out, we saw in the distance two troops of Bedouin coming towards us from different quarters full speed, they seemed to consist of about twenty men each Full gallop they came, one had a little the advantage of the other and reached us first Suddenly reining in their horses, as they reached us, the chief rode out—a dark-looking, cunning little man, with a beautiful blue abba embroidered with silver lace, his horse's appointments being covered with small silver coins It was Mustafa Agha We had hardly time to salute him when the other party came charging up, our old friend Goblan and company. It was a curious sight to see the two meet—the Government head and the outlaw chief Goblan for once looked quite dignified and haughty when he distantly returned Agha's salutation The parties were equal, and it would not have been etiquette to have quarrelled before us, so the respective suites kept together, while the chiefs came out and tried each in his way to get our ear

'Then arose a difficulty. each of these chiefs wanted to take us down the Ghor We

soon disposed of 'Arabeh, and it remained between the Agha and Goblan No doubt it was the Agha's duty to take us, and yet he did not know the road and dared not venture beyond his post, in fact, we suspected that he would have been glad to escort us as an excuse for visiting the country On the other hand, Goblan was only a nominal sheikh, and his only hold on his tribe was their ancient fear After weighing the matter over, we concluded that the Agha would be more expensive than Goblan, that we should be sure to lose our road and our baggage with him, and that Goblan would be preferable Accordingly, we thanked Mustafa Agha for his courtesy, and told him that we had our own Government soldiers, and did not require more, and that Goblan would probably go with us, and then we parted We thought that the lesson Goblan had learnt about stealing the beasts would keep him from such deeds next time he was tempted And after all, Goblan, in spite of his stealing our mules, and other faults, is as good a specimen of an old rascal as can be met with in these degenerate days of Bedouin

'We arrived at Damieh at dusk, and camped close to the ferry-boat, which was now plying across whenever wanted, the rope having been repaired We now raised the question whether we should return to Jerusalem or not, and it was decided that we should go on.

'The ford at Damieh is just below the junction of the Zerka and Jordan The Zerka, soon after it emerges from the hills, flows through the lower plain of the Jordan, which is sometimes on either side of it ½ mile wide

'Next day (4th March) up early and rode along the east bank of the Jordan until we reached Nimrin Stopped here three hours, and then, crossing the old Roman road from Amman to Jerusalem, arrived at 'Ain Suwaimeh (a distance of 30 miles) at sunset, here we encamped On our way we had met with several impediments, Goblan wishing us to stop at his camp near Nimrin We, however, paid his camp a visit, and made the acquaintance of his wife and family 'Ain Suwaimeh is close to the Dead Sea. We found it very hot here, and were glad to start early next morning for Zerka Main

'*March 5th.*—Our path first led along the north east end of the Dead Sea over blocks of sandstone and trap We left at 8 5 a m , 9 a m passed Wâdy Chuweir (stream of water), and at 9 25 arrived at Wâdy Menshallah, which is the name for a mass of wâdies Here we commenced our ascent The path lay in the eyes of the Bedouin, and the steepness was very great In one hour we had arrived at 1,450 feet above the level of the Dead Sea, and at 11 a m got into the large Wâdy Menshallah We now ascended more gently, and eventually arrived at a broken plain, with hills rising in front of us to the east, on the top of which is the ruin of Mineych On our right was a cleft in the rock 200 feet deep, and the bottom crowded with palm trees The scenery was wild in the extreme At noon we arrived at Wâdy Hamara, where there is a little water springing from the rocks Here we encamped

'We were now again in an unknown country which had not been visited for ages

'In the afternoon we started for the Wâdy Zerka Main, which we understood had not been visited since Irby and Mangles were there in 1817 Our path lay over ravines and rocks for an hour, when we suddenly came upon the Zerka Main The view was startling A steep ravine, more than 1,000 feet deep, the sides of the most varied hues—black, blue, scarlet, and yellow, every coloured sandstone, and at the bottom a stream winding among the palms and green shrubs, outside the ravine, everything blue, and cold, and desolate It took us only a short time to descend At about 100 feet from the bottom of the wady we came upon the hot spring, scalding water issuing from a cleft in the rock, and then disappearing again to come out at the bottom of the wâdy, and mingle with a cold spring which

issues from a point a few yards more to the east Going down the wâdy about 200 yards from the junction of the hot and cold springs, the water was still too hot for the body to bear —167° Fah , at the point where it issues from the ground it must be near boiling—but our thermometers would not read so high. We looked about for the wonderful plants with pods spoken of by Josephus, but we could only find the young plants, the pods being about 6 inches to 1 foot long The plant was, however, in flower, and the colour would fully justify his description of their looking like flames

'We found a good deal of yellow stuff about the water, looking like sulphur, but none has been traced in it The water tasted pure enough

'These are the hot springs of Callirhoe, where Herod is supposed to have taken baths

'It took us one hour and twenty minutes to ascend, the Bedouin in great wonder at our going down to such a place merely to come up again.

* * * * * *

'The valley of the Jordan has been described completely in many works, but it may be desirable to offer a few remarks on the subject From the sea of Tiberias to the Dead Sea there is one deep depression, the hills from east and west nearly meeting in many places, but never joining This depression is filled up to a certain level with an alluvial deposit, forming a vast plain called the Jordan valley, or Ghôr (pronounced Rôr) This is the "upper plain" It varies in width from 1 mile to 12, and has a slope from Tiberias to the Dead Sea of about 600 feet in the 60 miles

'This plain, however, has not alone this southerly slope, it has also a slope from its lateral extremities to the line of its centre of about 5°, forming a very open V in section, at the lowest part of which runs the Jordan. The Jordan has cut out for itself a still lower plain—lower than the preceding by some 50 to 100 feet, and from ¼ to 1 mile wide This is the "lower plain" Being itself only 60 yards wide, the river does not occupy the whole of this lower plain, but twists about in it, winding from side to side, and each day increasing the plain in width by undermining the banks on either side

'The lower plain is inundated whenever there is a more than ordinary fall of rain in the hill country in the spring time

'The banks between the upper and lower plain are not regular, they are fretted away by the fervid sun, the strong winds, and heavy rains, and are very ragged, in parts they are, during the rainy season, covered with the most beautiful verdure In the lower portion of the Jordan valley the banks where the streams join the Jordan (Wâdies Enwaimeh, Fasail, Kelt, and others) are broken up for miles, presenting a most curious appearance, forming, not a system of hills, but a system of valleys, the original plain being left standing every here and there, isolated and forlorn At first sight it would appear impossible that such small streams could perform such a work, but it is the sun, wind and rain completing what these small streams have begun, and now there are to be seen these little streams, at best not 3 feet deep and 6 feet wide, winding through lofty banks, nearly 100 feet high, whose irregularities exist perhaps 1 mile from the stream itself.

'The plains of the Jordan are only sterile at the southern end for a few miles north of the Dead Sea, and that only on the western side North of the Aujeh—that is, about 10 miles north of the Dead Sea, the soil is not salt and will bear plentifully, provided there is water, so much so, that during the rainy season the Jordan plains for miles are vast meadows abounding in grasses and flowers. Those who see the country after the sun has burnt up all this pasturage may very well be led into the idea that nothing will grow there, for when the

hot winds spring up in May, the grasses, like tinder, are broken up and blown away, and nothing remains but a barren waste

'During January, February and part of March, flocks are brought down from the mountains to feed on the rich pasturage of the plains, they come down within 1 mile from the Jordan'—'Our Work in Palestine,' pp 224—238

NOTES ON A VISIT TO SAIDA IN JULY, 1869

'The journey up from Jerusalem to Beyrout, overland, in the summer time, has two advantages to those who can enjoy riding in the full blaze of a Syrian sun for several hours every day

'1st The days being so much longer and the roads dry, a journey that takes the whole day in winter can be accomplished by noon

'2nd All the undervegetation being burnt up, any architectural remains can be examined without difficulty

'Starting on 11th July from near Jerusalem, without tents, and provided with letters to the several Turkish governors, and (through the kindness of M Ganneau) with introductions to the various Latin convents, I arrived at Beyrout in eight days, including one day's detention at Saida

'On the second day, at Jenin, midway between Nâblus and Nazareth, we found no accommodation whatever, but, the soldiers having lately moved down to Beisan (where a block house has been built), we were able to get possession of the chief room in the deserted serai.

'We arrived at Nazareth on the third morning, about eleven o'clock I paid a visit to Dr Varton, to whom Dr Chaplin has confided the care of the meteorological instruments of the Palestine Exploration Fund at this station It is gratifying to see how much interest he takes in this work, and it would be very desirable to send some more mercurial barometers out to Jerusalem, so that Dr Chaplin could supply Nazareth and Gaza

'The observations at the two hill stations, Jerusalem and Nazareth, as compared with those at Jaffa and Gaza, will be of great interest, as will these again compared with those taken by Mr. Eldridge in the totally different climate of Beyrout and the Lebanon.

'I understand that observations were taken at Saida by the American missionaries for several years It would be desirable to obtain permission to examine these, and publish what would be useful

'Next day, from Nazareth early, I passed Sefurieh There are several interesting remains about this town I examined the square tower at the top of the hill, and do not think the lower stones are *in situ*, they have sunken marginal drafts, and some stones are 2 feet 6 inches in height and 4 feet in length, but they are somewhat carelessly worked, and very inferior to those in the Haram area at Jerusalem It was interesting to find a Phœnician sarcophagus used as one of the corner stones of this tower I enclose a sketch of it, and also of a pedestal lying near Passing on through Kana el Jelil and Jafat (Jotopata), I arrived early in the day at Akka, and paid a visit to the Pasha he was extremely obliging, and gave

me orders for visiting every place in the city. I was very much struck with the air of bustle and stir about Akka after Jerusalem. The Turks and Arabs are certainly moving on in this part of the empire. At Jerusalem, Nâblus, and Akka, they are extensively repairing the serais of the pashas; but, at the latter place, the people have led the way by repairing the mosque, and (putting aside the nature of the style) it is really very thoroughly repaired. The change after the neglected, dilapidated Haram area of Jerusalem to this little compact mosque of Akka is complete: the interior of the building new and clean, the floor carefully covered with new matting, the court outside well paved and swept, the fountains flowing with water, and the whole area filled with palm and other trees so as to have a shade all round, and giving a charming air to the little place.

'The master-gunner of the garrison took me all round the city walls. He appeared to have a peculiar satisfaction in showing every place which had been damaged by the English or French. It was rather disagreeable to see the waves dashing into breaches in the walls made so many years ago; but yet it shows a higher state of vitality when the mosques and houses are repaired in preference to the city walls.

'Next morning I was much interested in the aqueduct which should carry water into Akka. Half-a-mile before reaching the city it has occasion to cross a hollow piece of ground; the water is carried along in two earthenware pipes on the surface of the ground, and at intervals it is forced up hollow columns of masonry open at the top, so that a minimum pressure, due to the height of the column, is exerted upon the pipes. Unfortunately one of these columns is out of order, and the water, in a stream sufficient to supply a city double the size of Akka, only serves to irrigate a little piece of meadow land.

'I had been told by Dr. Barclay to look out for a solitary column on a hill to the right, somewhere near Neby Daud, and went over to a village in that direction to inquire about it. With one exception, the people gave evasive answers, and roundly abused the only man who seemed inclined to be communicative. I have found before, in the plain of Philistia, that the people are more suspicious and less frank than the mountaineers, and that the only way to get information out of them is to make assertions, when they will contradict you if you are wrong. We had to leave the place without finding what we wanted, but a man followed us, and, as soon as he was out of sight of his comrades, told us that the only large standing column was at Hamsin. As we rode on we saw it standing up by itself on the top of a small hill, and, on examination, I found it to be the same as is spoken of in Dr. Thomson's "Land of Israel," p. 83. Dimensions were not accurately taken: the capital I could not find, but there is a twelfth stone of the column lying near.

'Passing the Ras el Abiad, the Scala Tyriorum (where the path has now been made quite easy), there is on the right the village of Mensûrah, where I have been told, recently, a small pyramid of black stone has been found, apparently to commemorate some victory. This stone is said to have a square base, the sides being equilateral triangles; no inscription was found on it.

'We passed out of our way again to visit "Hiram's Tomb," as I was anxious to see if there were any masons' marks on the stone. I could see only two: one is a Christian cross of the Byzantine type at the western end, of which I have got a squeeze; it appears to be ancient. The other consists of a square and compasses, very recently and rudely cut, apparently by some enthusiastic "mason," who should have learnt the *proper* use of his chisel before he attempted such a task.

'We did not arrive at Tyre until after sunset, and, having to get into Saida early next day, I had to leave without examining the old walls.

'After passing the Nahr el Kasmiyeh about one hour, and when opposite to Neby Sûr (called by a Fellah there Neby Tûr), I noticed on the left, close to the sea beach, some upright stones, and on coming up to them found them to form a rectangle, the sides nearly facing the cardinal points of the compass. The stones stand about 4 feet above the surface, and are about 2 feet by 1 foot thick; they stand nearly upright, and are from 6 to 8 feet apart; about 20 feet to the east is one solitary stone; the north-west portion of the rectangle is wanting. The story given was that they had been men turned into stone by the curses of Neby Tûr. I was struck by the Fellah calling the Neby "Tûr," because he called the city "Sur."

'In the "Handbook for Syria" (ed. 1868), we find, p. 375, "We observe on the right a circlet of upright stones, to which a curious legend is attached," etc. It is probable that it is this rectangle that is referred to, since at a short distance the stones appear as though in a circle.

'Saida is described in "Robinson's Biblical Researches." The houses and city walls are built of freestone ashlar, said to be dug up, for the most part, from ruins existing at a few feet below the surface, in the vicinity of the city. Some of the stones in the walls of the private houses have incised characters on them; on one house I noticed three stones about 12 feet from the ground, each with a mark like the Phœnician aleph.

'On making inquiries, I could not hear of any sunken marginal drafted or "bevelled" stones having been dug up; the old stones appear to be squared, or ashlar, without a conspicuous draft.

'In the castle or citadel, which is above the city, the older portion of the wall (ascribed to Louis IX., A.D. 1253) is of two constructions: one portion is built of very small ashlar, and on it I could see no characters cut; on the other portion, which may be of the same age, but is built of old material, I observed three or four characters, two of them, a cross and an arrow, high up out of reach; but close to the ground was a triangle, *in course of construction*, which is probably completed by this time, if the artist engaged on it has kept to his work. The stones of this portion are about 22 inches long, and 13 inches high; two or three only of the stones have any marginal draft.

'I could see no characters on the stones of the inside walls of this upper castle, but I here only made a very hurried examination. In the sea-castle the walls are evidently of very different ages, but none of the visible portions appear to have been built before our era, and there appear some reasons to suppose that the older portions may have been constructed by the Moslems, or in the time of the Crusades, for example, in one portion of what appear to be the older walls, huge granite columns are used as thoroughbonds, just in the same way as they are at Ascalon and Cæsarea, and in the upper part of the east wall of the Haram area at Jerusalem.

'If, however, we were certain that the older visible walls of this castle were built by the Moslems or Crusaders, there would still be the probability that the present stones, as they now appear, were used in the latter days of the Roman Empire, and that they may have been used previously in another form at an earlier period, for there is an arched doorway, very well preserved, which is very similar in its details to examples of Roman architecture (rustic work) given by Vitruvius, and the stones generally, in their bevel, appear to be of a Roman type. The impression I obtained from the two visits I paid to the castle is, that the stones were

at one time ashlar, without a draft, and probably with the present Phœnician marks on them, that they were cut down in the time of the Roman occupation of the city, and the marginal draft was then sunk and the bevel cut, and that again they were used at a later period, without being reworked, by the Moslems or Christians

'I have, however, to remark that, in some cases, what appear to be modern buildings abut against the old walls, and have preserved portions of them in a manner that is very surprising, if we are to suppose them to be of very great antiquity

'The stones in the older portions of this castle are "bevelled," but they differ very much from those at Jerusalem, to which the term "bevel" does not appear appropriate They (at Saida) are formed by sinking a draft about 2 inches deep round the margin, and then bevelling off the projecting face at an angle of 45° In some cases it appeared as though the draft and bevel had been cut over a portion of the Phœnician sign

'In comparing, however, the bevelled stones of Saida with those of Jerusalem, the difference in the nature of the stone must not be forgotten, a draft sunk only from a quarter to three sixteenths of an inch, similar to those on the stones of the Haram esh Sherif, would appear very insignificant on the open freestone of Saida, and would probably be worn away in a very few years if exposed to the weather

'Dr Thomson, at p 158 of "The Land and the Book," gives some very interesting particulars upon this subject, some of which I take the liberty of quoting —

'"Most of the towns along the Syrian coast, however, are built of an argillaceous sandstone, mixed with comminuted shell, which, though porous and easily cut, will yet, if protected from the weather, last for ages, but, when exposed, it disintegrates rapidly, and soon melts away to dust This process is hastened every time the ruins are *worked over* for new buildings The stones must always be re-cut before they are put into a wall, and, after being thus reduced two or three times, they become too small for use, are thrown into the fields, and quickly dissolve In other places, where the material is compact limestone, and not subject to these causes of destruction, it is broken up and burnt to lime"

'The larger visible stones in the sea-castle are generally under 2 feet in height, and about 4 feet in length, it is possible, however, that there may be much larger stones of a more ancient wall *in situ* in the thickness of the present walls, for on creeping through a broken portion of the northern wall overhanging the sea I found above my head a stone which measured quite 8 feet north and south, east and west, and I could see no signs of any joint This stone, then, would be in keeping with those which still remain on the reef of rocks forming the ancient harbour, the largest of which measures about 11 feet by 12 feet, and about 5 feet in height, and weighs about thirty-five tons I could see no signs of any bevel or draft on the stones forming the *walls* of the harbour, although dowel holes cut in these stones and in the rocks are very distinct

'Mons A Dunghello, the vice-consul for France, took a great deal of trouble in showing me what was most interesting at Saida, especially the Phœnician tombs, in which so much has been found, but I was disappointed to find that the nature of the rock in which they are cut prevents their being finished off in any manner, and the sides in many cases have been coated with plaster, so that they now have a very dilapidated appearance

'I could neither see nor hear of any *red paint* marks on the plaster, similar to those we have found on the walls of the Haram esh Sherif The sarcophagi are generally cut out of the solid mountain limestone (the tombs being sandstone) and have devices on them which I have seen in Palestine; at Sefûrieh, the sarcophagus built into the corner of the tower is very

similar to those found in these tombs at Saida There is the rectangle with the triangle at each end, and also the disc (sun?) with the hand underneath, the device of the rectangle with the triangle at each end (see Sketches) was also to be seen on the Phœnician sarcophagi near the river Damûr, and I have seen it in Palestine, more especially over a ruined bridge on the east side of the Jordan, where the Zerka issues into the plain above the ford of Damieh

'M. Durighello was kind enough also to show me all the little pieces of pottery which he had lately found in his excavations, and I noticed that they are precisely similar to what we find at Jerusalem in the middle of our sections, below the early Christian pottery, and above the pottery found at the south east angle of the Haram I did not see any pottery similar to what has been lately found at Cyprus

'Mr Arbela, the English consular agent, was good enough to show me some columns he had found in his garden Of one, the pedestal, base, and capital are lying together on the pedestal is an inscription in Greek (of which I have an excellent squeeze), dedicated to the Emperor Hadrian The base is Attic, and the capital Corinthian On the bed of the latter is the mason's sign or name, in Greek, incised, but it is difficult to make it out at present I have a squeeze of it

'It is interesting to remark that there are incised marks on the walls of the city, showing where the aqueduct runs, in the shape of a round O but this mark must be quite modern

'M Durighello is going to preserve either squeezes of, or the stones themselves, which he finds in future in the ground bearing Phœnician marks He took me to see the capital of a column lying in a mosque, of which he has the fellow in his possession I forward you a sketch of it, it appears to be somewhat similar to the capital of one of the monoliths at the Golden Gate, Jerusalem

'I am able to send you about twenty of the characters from the sea-castle walls, reduced from squeezes, and about twenty more which I sketched

'On arriving at Beyrout I found that the consul-general, Mr. Eldridge, who was away on business, had very kindly made some preliminary arrangements about a house in the mountains, and I had no difficulty in securing it at once'—Captain Warren, 'Quarterly Statement,' 1869, pp 136—141

THE TEMPLES OF CŒLE-SYRIA.

'Cœle-Syria, consisting of the fruitful Buka'a, closed in by the water producing hills of the Lebanons, has from remote ages flourished and abounded in cities

'The rich plain, in peaceful times, would support an immense population, which, in time of war, has only to retire to the mountain fastnesses to be secure against attack, and where the soil is sufficiently productive to support it, it is, however, apparent that the country owes its chief wealth to the fertile plain below, which in the season is one unbroken expanse of corn as far as the eye can reach

'In early times, there can be little doubt that the summits of the hills were the more important places of worship, and temples may have been erected on them, but the temples, the remains of which now exist, appear to have been essentially temples of the plain It is true,

St Jerome tells us that in his time there was a remarkable temple on the summit of Mount Hermon, in which the heathen from the region of Panias and Lebanon met for worship But it does not follow from this that they were the same people who worshipped in the temples down below Probably, at that time, as now, there were several religious sects in the country · some perhaps, following the old sun worship others, the worship of the celestial gods · others, that of heroes, and, probably, many adopting a mixture of all

'We have now in the country several distinct sects of Christians, two distinct sects of Moslems, and also two sects of which very little is known, of one of these latter, Benjamin of Tudela (A D 1165) speaks ("Early Travels in Palestine," p. 51), and it does not appear impossible that this sect should have been descendants of the original inhabitants, who may have preferred the secret worship introduced (?) by the emissary of the mad khâlif, Hakim (A D 1120), to the open religion of their Moslem rulers

'That the older forms of sun-worship existed side by side with the not less idolatrous worship that sprung from it there can be no doubt Even as late as the time of the prophet Ezekiel we have a record of it, Ezekiel viii 16—" and, behold, at the door of the temple of the Lord, between the porch and the altar, were about five and-twenty men, with their backs towards the temple of the Lord, and their faces toward the east, and they worshipped the sun toward the east" So that Hermon and other peaks of the Lebanons may, until very late times, have been places of worship, but the very text just quoted goes against the existing temples about Hermon having been used for the earlier form of sun-worship, for many of them are so placed that the sun cannot be seen until an hour or two after it has risen, and there does not seem any necessity in this form of worship for there to have been a temple at all, though the sun worshippers in Egypt appear to have used them See bas relief at Tell al Amarna (Fergusson's "Architecture," p 122) Dr Potter (vol i, p 219) says that the Persians had no temples, even in ages when temples were common in all other countries, and that they sacrified *upon some high place*

'It has been surmised by Dr Robinson and several writers that the temples about Hermon were turned towards it as to a kibleh, so that the worshippers might face it when they prayed The directions of these temples have now been taken, and also the angle from them towards Hermon, and it is found that they all have their *entrances*, more or less, towards the *east*, and in no case does the entrance, or any side of the building, face direct upon the summit of Hermon

'And there appears to be no reason, at first sight, for supposing that the directions of these temples are governed by any rules but those applicable to the late temples of Baalbec, Jerash, Palmyra, and the Hauran

'The question of the orientation of heathen temples is one of very great interest I have not had access to any works specially treating on the subject, and therefore submit the following remarks with great diffidence, under the impression that the problem may have already been worked out The silence, or reticence, however, of the books I have consulted, is so very striking that I make it a reason for bringing forward ideas on the subject

'The Egyptian temples of the eighteenth and nineteenth dynasties (attributed to the time of the Exodus) are said (Fergusson's "History of Architecture," p 103) to face in all directions

'There would, probably, have been then, as now, few existing remains of the works of the sun-worshippers in the country

'The Israelites would then have had no especial kibleh, arising from their contact with the

Egyptians, beyond, perhaps, the double sentiment with regard to the East, viz., an inclination towards it as the point from whence God's presence should come, and a repulsion from it as the kibleh to which the sun worshippers turned.

'On the arrival of the wanderers under Mount Sinai, divine revelation planned out the tabernacle, not only with regard to its proportions and furniture, but also as to its position. It was to lie east and west, the entrance towards the east. The reason for this "orientation" is not given any more than it is given for the particular services that were to be performed, but reason there must have been. Josephus (Ant. iii. 6, 3) quietly tells, "As to the tabernacle, with its front to the east, that, when the sun arose, it might send its first rays upon it." This reason, however, he rather spoils in Ant. iii. 8, 5, when he says "The sky was clear, but there was a mist over the tabernacle only, encompassing it, but not with such a very deep and thick cloud as is seen in the winter season, nor yet with so thin a one as men might be able to discern anything through it." In the sacred narrative we read (Exod. xl. 34) "Then a cloud covered the tent of the congregation, and the glory of the Lord filled the tabernacle. For the cloud of the Lord was upon the tabernacle by day, and fire was on it by night." This would appear to be sufficient to prove that the tabernacle had not its entrance to the east merely in order to receive the sun's rays, for it seems probable that the sun's beams only played upon the exterior of the cloud, and would never have shone on the tabernacle itself. Nor, when we consider the matter, does it seem probable that the reason given by Josephus would have been held good by the Israelites at the time of the first erection of the tabernacle, for they can hardly have given any special consideration to the sun when such extraordinary manifestations had been going on on Sinai, when they saw that the face of Moses shone with the reflection of the "glory of the Lord," that a miraculous cloud descended upon the tent, and that "fire came out from before the Lord, and consumed upon the altar the burnt offering."

'Far more reasonable is the idea of some of the Jews of the present day, who say that the entrance of the tabernacle was towards the east, in order that the priest might watch for the first dawn of day in offering up the morning sacrifice. The reason would hardly, however, have held good if the tabernacle had been first placed on the west side of Mount Sinai, as then the first dawn would not have been visible towards the east. It hardly appears as if the sun would have anything to do with the position of the tabernacle, considering that the sun in one way or another was a great object of idolatry among the surrounding people.

'In the construction of the Temple of Solomon we have again no reason given for the placing of the entrance to the east; but in the book of the prophet Ezekiel, xliii. 2, we have, "And, behold, the glory of the God of Israel came from the way of the east," and, again, we have Matt. xxiv. 27, "For as the lightning cometh out of the east, and shineth even to the west; so shall all the coming of the Son of man be." Now this may perhaps explain it all.

'The ancients may have originally turned towards the east to worship the "glory of the Lord," and have gradually learnt to look upon the sun as a symbol of that glory.

'In the erection of the tabernacle the pure worship of God was restored to the general community, but the old kibleh of the east would not do, because it had already become the means of a gross idolatry, so the tabernacle was built to contain the glory of the Lord, its entrance facing the east, from whence the glory came, and thus the Israelites were brought to face in an opposite direction to the sun worshippers, while at the same time they actually did face towards the same glory to which they had turned in the east previous to the setting up of the tabernacle.

'Now, although the "glory of the Lord' filled the tabernacle, and after it the house of the Lord in the first Temple, and though the Lord dwelt there (Exod xxix 45, 1 Kings viii 12), yet it appears that the Israelites did not pray to the Lord in the house, but turned towards the house and prayed to him in heaven See Deut xxvi 15, where Moses tells the people to pray, "Look down from Thy holy habitation, from heaven, and bless Thy people Israel"

'See, again, also, how Solomon prays at the dedication of the Temple, immediately after the glory of the Lord had filled the house, 1 Kings viii 12 "Then spake Solomon, The Lord said that He would dwell in the thick darkness 13 I have surely built Thee an house to dwell in, a settled place for Thee to abide in for ever 22 And Solomon stood before the altar of the Lord in the presence of all the congregation of Israel, and spread forth his hands toward heaven 23 And he said . . 27 But will God, indeed, dwell on the earth? Behold, the heaven and heaven of heavens cannot contain Thee, how much less this house that I have builded? 30 And hearken then to the supplication of Thy servant, and of Thy servant Israel, when they shall pray toward this place, and hear Thou in heaven Thy dwelling place and when Thou hearest forgive"

'Dr Potter, in his "Greek Antiquities," vol 1, p 284, shows us that a precisely similar custom obtained among the heathen long after the statues of the gods had ceased to be regarded as mere symbols of the deities above and below "We do all lift up our hands to heaven when we pray, saith Aristotle," and again in Horace

"Cœlo supinas si tuleris manus"

Again, Burckhardt ("Travels in Arabia," vol 1, p 175) tells us that at the hill Szafa, "with his face turned towards the mosque (the kaaba), which is hidden from view by intervening houses, the pilgrim *raises his hands towards heaven*, addresses a short prayer to the Deity,' etc, he then goes on to inform us (p 177) that the hill Szafa, prior to Mahomet's time, was esteemed by the old Arabians a holy place, containing the image of the god Motam

'We find also the heathen of the ages after King Solomon with many other customs in their services similar to those of the Jews, and from the existing remains of their temples in Syria, Greece, Italy, and Sicily, we find that they had for the most part also the entrances of their temples to the east, so that they must have worshipped towards the *west* also, as did the Jews

'Now the ancient historians, and the commentators on them, on the contrary, agree in saying that the entrances of the ancient heathen were to the west, and that they worshipped towards the *east*

'Dr Potter tells us 'it was ancient custom among the heathens, to worship with their faces towards the east. This is affirmed by Clemens of Alexandria, and Hyginus, the freedman of Augustus Cæsar, to have been the most ancient situation of temples, and that the placing the front of temples towards the east was only a device of later ages."

'Vitruvius (B C 25) also says that the entrance of temples should be towards the west, though in his time many temples must have already been built turned towards the east

'Dr Potter again tells us "the Greek scholiast upon-Pindar (B C 25) tell us, they were wont to turn their faces towards the east when they prayed to the gods, and to the west when to the heroes or demigods Others say (Cœlius Rhod lib xii cap 2) they always kept their faces towards the sun"

'Dr Mosheim also, in his ecclesiastical history, says (vol i, p 57) "Before the coming of Christ all the eastern nations performed divine worship with their faces turned to that part of the heaven where the sun displays his rising beams This custom was founded upon a general opinion that God, whose essence they looked upon to be light, and whom they considered to be circumscribed within certain limits, dwelt in that part of the firmament from whence he sends forth the sun."

'There is then either a conflict between the testimony given by the historians and by the existing remains of temples, or else we must suppose that at a certain time the ancient custom of having the entrances of temples turned to the west was changed to having them towards the east

'Now, of the more important temples that are known to have existed in Europe, the earliest date assigned to any of them does not appear to be more than B C 600, and of these, two at least of the oldest, the Parthenon and that of Jupiter Olympus, at Athens, are said (Stewart's "Antiquities of Athens," pp 52 and 107) to have had their principal entrances to the west In Syria (where the temples, as they exist at present, do not appear to be earlier than B C 100, and to range up to A D 300), the entrances, as far as I know, are in all cases to the east

'It would, then, appear that we have no cases of any temples with their entrances to the east earlier than B C 600—that is, about four hundred years after the construction of Solomon's temple, and eight (?) hundred after the setting up of the tabernacle

'In other words, it would appear that at the setting up of the tabernacle the Israelites had commenced to turn when worshipping in a direction contrary to that of the sun-worshippers, and continued so, and that the heathen at least eight (?) hundred years afterwards, or not earlier than the destruction of Solomon's Temple, changed their custom also, and turned as did the Jews.

'Now, finding that the positions of the temples in Cœle Syria are similar to that of the Temple of Jerusalem, we turn to the remains of the Jewish synagogues in Galilee, and find that their entrances, with one exception (see paper of Captain Wilson, R E, No II "Quarterly Statement"), face the south This is more particularly interesting because the architecture of these synagogues seems to have grown out of that of the temples immediately to their north, about Hermon

'At first sight, it appears as if it would be natural to suppose that the chancel of synagogues should be towards Jerusalem, and the doors on the opposite side, so that the people should not turn their backs on their kibleh when entering But there is another way of looking at the matter, viz., by continuing the principle on which the Temple was built to the synagogues also: the Temple with its door fronting the east, from which the glory of the Lord proceeded, the synagogues with their doors fronting towards the Temple, in which the glory of the Lord resided or used to reside There also may be another reason for the entrances being towards Jerusalem, namely, in order that there should be as little obstruction as possible between the worshippers and their kibleh Thus we find Daniel (Dan vi 10) prayed, "his windows being open in his chamber towards Jerusalem," and we find the same idea running through the eastern mind in a legend given, I think, in Burton's "Travels in Arabia," where Mahomet, either at Kuba or at the Kibleytem, being uncertain of the true direction of Mecca, suddenly saw his holy city, though so many miles off, and in spite of the many obstacles otherwise intercepting his view

'I understand from Mr Church that near Beersheba there are the remains of a synagogue

similar to those in Galilee If it were found that this also has its door facing Jerusalem, it would cast more certainty about the matter, for at present all the known remains of synagogues are due north of Jerusalem

'In examining the authorities with regard to the direction in which the synagogues should face we find very conflicting evidence

'Vitringa and Buetorf make Jerusalem the kibleh, so that worshippers when they entered and when they prayed looked towards it Clemens of Alexandria makes the east the kibleh, and Dr Lightfoot, quoting from the Talmud, tells us that the chancel, corresponding to the holy of holies, was towards the west, the people facing that way Probably Clemens of Alexandria only referred to European and African synagogues, and thus so far agrees with Vitringa and Buetorf, but we have still left two systems, the one in which the chancel is towards Jerusalem, and the other in which the chancel is to the west, and to complicate the matter still further, we have the *existing remains* of synagogues with their entrances towards Jerusalem, and therefore, apparently, their chancels away from it The Jews in Jerusalem state that at the present day they face towards Jerusalem when they pray, wherever they may be Some Moorish Jews also told Dr Chaplin, that during certain prayers they faced both north and south also, but they were not quite clear in what they said

'To return to the temples of Cœle-Syria That these temples should not be immediately in the plain there is good reason

'In the first place, we find generally around them the remains of cities or villages, which implies that the temples were built for the worship of their occupants, and the towns again are placed a little off the plain, on the spurs of the hills—near the plain, so that the husbandmen should not be far from the scene of their daily labour, in the hills, so that they might easily defend themselves from the attack of an enemy The plain itself also is in a great measure unfit for the erection of permanent cities, as it is for the most part a swamp during the rains The name *Haush* (herd-fold) so often used as a prefix to the names of the small towns at present in the plain, of itself points to the temporary nature of these places, for example, Haush Hâla, Haush el Ghanîn, Haush tel Sefeih

'On looking at the map it will be seen that the large towns of the present day are all just out of the plain, under the hills Baalbec, Zahleh, Kubb Elyas, Rasheiya, Hasbeiya, and Jubb Jenin

'Now, with regard to a prevalent idea that the existing remains of temples cling more particularly around Mount Hermon It is only necessary to look at a map, on which all the known sites are marked, to see that Hermon is not the site of a great preponderance of temples, and when we hear what Gibbon has to say on the matter, it does not appear singular that the village temples around Mount Hermon should still exist, while all but the very large ones in other parts of the plain have disappeared

'Gibbon, p 465 —"In Syria (about A D 381) the divine and excellent Marcellus . . resolved to level with the ground the stately temples within the diocese of Apamea . . . and he successively attacked the villages and country temples of the diocese . . . A small number of temples was protected by the fears, the venality, the taste or the prudence of the civil and ecclesiastical governors"

'I do not know how far the diocese of Apamea extended, probably not so far south as Baalbec, but supposing that these Christians were able without difficulty to destroy the minor temples of the plain, they could certainly have been brought to a standstill at the gorge east of Jubb Jenin, where the plain to north-west of Hermon is connected with the great

Buk'a. Thus we may account for the small village temples of Hermon still existing, but it is also to be observed that there is another destroyer of temples who has been slowly working for centuries—the builder

'In the great plain it would have been easy enough to have carried off the cut stone of smaller temples to the new sites of churches and mosques; about Hermon the rugged nature of the country would prevent the stone being worth its carriage We have thus, apparently, good reason for believing that the villages and towns about the plain had their small temples, as are found about Hermon, but that they have either been destroyed or devoted to other purposes

'Two temples only of those visited (besides Baalbac) bore decided marks of having been used as Christian churches, those of Rukleh and Burkush

'On the whole, then (apart from the architectural indications), there does not appear to be sufficient reason for supposing that these temples, remains of which now exist, had to do with the old worship of the country, but rather that they belonged to the towns and villages, and had to do with the worship of statues of the gods They appear to have been placed in the most conspicuous parts of the towns, and probably varied in size and magnificence, according to the number and wealth of the population

'The inscriptions on these temples are mostly Greek Copies, where possible, were taken, but generally only a few letters in each line were visible.

'When we examine the architecture we find no trace of Assyrian or Egyptian ornamentation, the temples are very like Roman of a late date, but some of the little ones about Hermon may be earlier

'At the temple at Damascus there are Egyptian mouldings on the capitals of the pilasters, at Rukleh there is a dark-coloured stone, with what appears to be an Assyrian eagle With these exceptions (and also of Baalbec), the work appears to be of the time of the Seleucedæ and the Romans

'We are told by Dr Mosheim that the heathen worship continued in Syria as late as A D 420, when the inhabitants summoned Simeon Stylite to help them from the ravages of wild beasts, and he counselled them to give up their idolatry, and Theodosius the younger made a law about the same time enjoining the destruction of all heathen temples in default of their being turned into Christian churches

'We have, then, nearly five hundred years under the Romans, in which these temples may have been built

'There is one peculiarity about some of these temples which appears to distinguish them from those of Europe They are mounted on stylobates, and have no steps or staircase up to the entrance, and the only method of entering is by a small door opening from the side of the stylobate into the vaults underneath, and thence by some means into the temple itself, from this it would appear either that only the priests went into the temple, or else that there was some temporary wooden staircase up into the stylobate.

'The small temples about Hermon appear to be somewhat of more ancient date than those in the Buk'a, they are of the Ionic order, and are *in antis*, they in some cases differ from the pure Grecian style in having similar designs on the square capitals of the antæ to what there are on those of the columns The friezes also bulge in all, there are no dentals on the cornice nor ornaments on the frieze, the antæ diminish in width from bottom to top

'A description will now be given in detail of these temples, and afterwards an account of the tour in the mountains

'THELTHATHA (ALSO CALLED NEBY SUFA)

'*References*—"Robinson's Later Researches," p 426, "Land of Israel," p 601, "Murray's Handbook," p 537 There is also an excellent lithograph of the temple from one of Van de Velde's sketches

'A small village lying on the east side of the range separating the Hâsbâny from the Litâny A few feet above the village is the site of the temple, whence can be seen a great portion of the Hermon range

'The temple lies east and west, the entrance towards the east, the side bears due east (90°) by the compass, and a bearing to summit of Hermon gives 136°. Height above mean sea-level, 3,780 feet.

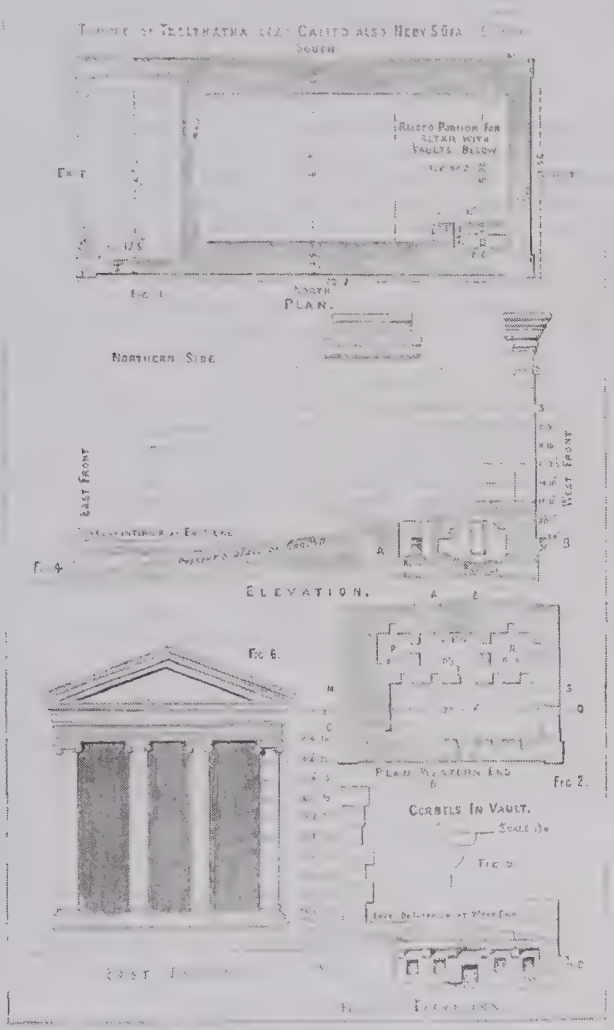
'The temple is *in antis*, and measures (see Plate) in length 72 feet 7 inches, and in breadth 35 feet 1 inch, including the projections of the antæ Height from cornice to platform of stylobate 34 feet 4 75 inches The pronaos is 14 feet 4 inches by 30 feet, the cella is about 48 feet by 23 feet 9 inches, but the transverse wall between the pronaos and cella cannot readily be distinguished on its inner side The cella is raised at its western end six feet above the floor of the temple This raised portion extends from western wall towards the east for about 19 feet, and below it are chambers

'These chambers may have been used as store-rooms, they are furnished with niches, and one of them also appears to have acted as a passage to allow the priests to enter the temple secretly (*vide* "Bel and the Dragon") For this purpose there is a door on the south side of the temple in the stylobate at 7 feet 7 inches from the western end this opens through a wall 3 feet 9 inches thick, into a chamber 22 feet 7 inches long and 9 feet wide At the end of this chamber to the north is a staircase (now walled up) leading to the raised platform above the side wall of the temple to east is then increased by 3 feet to allow of the stairs The side walls of the temple in other places are in thickness 5 feet 7 inches

'In the centre of the west wall of this chamber is a window, formed like a loop-hole, 10 inches wide outside and 2 feet 3 inches within On either side of this window are two niches 1 foot 10 inches wide, 2 feet 6 inches high, and 1 foot 10 inches deep Opposite to them on the east side of the chamber are two similar niches, and between them and opposite to the window is an opening in the wall, leading into a chamber 8 feet 10 inches by 5 feet 1 inch From this on either side to north and south are other two chambers, 6 feet 2 inches by 5 feet 6 inches, in these latter are other niches These small chambers (P, Q, R, Fig 2) are covered over by great flat slabs The silt or mud lies deep in these chambers, so that their height is uncertain, but it is probably not less than 7 feet. In the first and larger chamber, where the width is 9 feet, corbels are used for supporting the flat slabs for the roof (Figs 3, 4, and 5) There is first a corbel 1 foot 9½ inches high, and 1 foot 4½ inches projecting out, and above it a smaller corbel 1 foot 2 inches high, and projecting altogether 2 feet 2½ inches from the side of the chamber, so that the space to be spanned by the slabs is only 4 feet 7 inches wide These slabs are probably not less than 9 feet long, they vary in width from 4 feet to 5 feet and are perhaps 2 feet 6 inches to 3 feet in thickness This description of these chambers is here given with some minuteness, because in most of the temples met with the arch is used instead of corbels and flat slabs

'The temple is of the Ionic order (see restoration, Fig 6) The antæ are 3 feet 1 inch square near base, and diminish to 2 feet 10 inches near capital, they project at base 4 inches

beyond the pteromata; the bases are Attic; the capitals have two of their faces together uniform as in the Roman samples, there being volutes at three of the angles; but at the



fourth angle the volute has been hollowed out, so as to form a sort of handle in appearance. There are nine courses between the entablature and stylobate, measuring exactly 27 feet

in height, and the courses themselves are individually each about 3 feet in height (Fig 6)

'Robinson says there are thirteen courses of stone, perhaps he included the stylobate I only found nine courses The entablature is in height 7 feet 4 75 inches, the architrave and frieze are in one piece, measuring 4 feet 4 5 inches, of this the frieze measures 16 5 inches, and is cushioned Nothing whatever could be found of "the figures of a ram's head and bull's head alternately" on the frieze described in "The Land of Israel," though nearly every stone lying near the temple was examined, but, on leaving, stones were seen lower down the hill, and perhaps they may have been on some of these It does not, however, appear probable that the heads were on the frieze, more likely at intervals on the cornice nothing, however, was seen of any heads on the cornice The upper mouldings of the architrave are somewhat peculiar, the angle at the base of the pediment is about 21° 8'

'The temple stands on a stylobate which projects very slightly beyond the wall of the temple, to this there are two cornices, but no base visible It is in height altogether 5 feet 6 inches, and appears to have run right round the building, so as to have admitted of no steps in front (see restoration, Fig 6), and as the height is too great to have allowed of the people stepping on to it, it does not appear probable that it was entered by the vulgar.

'No capitals or bases of columns could be found Several portions of the shafts were found lying about, which measured 2 feet 11 inches in diameter

'There are no signs of any bevels (in the Jerusalem nomenclature) on the stones, but they are each well squared, and have a chamber one quarter of an inch round their edges They are of the ordinary blue limestone; this obtains by exposure a very blue colour, which gives to the country such a cold appearance.

'Fig 4 gives the north side of the temple as it stands at present The joints of the stones are inserted correctly as far as 50 feet from the west end, beyond that they are sketched in roughly On one stone the joint is at an angle, instead of being vertical, as this was found to be the case also about the same place on the north side of the temple at Ain Hersha, notice is here made of it

'The stones vary from 3 feet to 7 feet in length No signs of any inscriptions were seen

'The temple has very little remaining *in situ* except on the northern side, and a good deal appears to have fallen in the last ten years The men at the village said they had tumbled over a great portion lately Only a few hours could be devoted to this ruin, time quite insufficient for measuring the details of the mouldings with extreme accuracy

'HIBBÂRÎYEH

'*References*—Burckhardt, p 35, "Robinson's Later Researches," p 417; "Land and the Book," p 350, "Murray's Handbook," p 427

'Burckhardt describes the ruin of a temple at Hereibe, which is evidently the same as is now called Hibbârîyeh

'Hibbârîyeh is a village to south-east of Hasbaiya by about one hour and twenty minutes' walk, it is on nearly the same level, viz, 2,270 feet above mean sea-level

'Situated on a spur of a hill on the western side of the great Wady Shiba, the view to the west and south is exceedingly fine; but to the east Hermon cannot be seen

'The temple lies to the west, and below the village, in a field, its entrance is towards the east, the magnetic bearing of the side being 101°, and, as the summit of Hermon bears considerably to the north of east, the line of the temple cannot be in the direction of the summit.

'The temple is *in antis*, and measures (see plate) 55 feet in length and 29 feet 9 inches in breadth, including the projections of the antæ height from cornice to platform of stylobate, 26 feet 8 inches

'The pronaos is 11 feet by 25 feet, the cella 34 feet 5 inches by 21 feet 9 inches The side walls of pronaos are 2 feet 1 inch thick, of the cella, 3 feet 9 inches thick, and the wall at west end, 2 feet 9 inches thick The east wall of the cella is 2 feet 10 inches thick The interior is very much filled up with the fallen stones, so that it cannot be seen whether the west end of the cella is raised above the rest At the south west corner of the cella is a little staircase leading up into the building through the western wall. The temple is of the Ionic order (see restoration in plate), the antæ are 2 feet 8½ inches square at the base, but it was not observed whether they diminish towards the top in width They project near base about 1 inches beyond the pteromata, the bases are Attic, except that the skotia is not hollowed out The faces of the capitals on each side are uniform The columns are 2 feet 10 inches in diameter near base, the bases are Attic

'There are seven courses between the entablature and stylobate, measuring in all 21 feet 3 inches, each course is nearly 3 feet in height

'The entablature is 5 feet 6 inches in height, exclusive of the cyma of the cornice, which has not been measured The architrave is 2 feet 6 inches high, and the frieze 1 foot 7 inches. They are in separate pieces The frieze is cushioned, and bulges about 3 5 inches

'No heads were seen on the cornice The courses are bevelled, there is first a chamber round the edges of the stone, angle 45°, then a sunken marginal draft of 6 inches, dressed with a chisel the face of the stone projects two tenths of an inch There is no second chisel cut draft round the face (as at Jerusalem), and it is roughly dressed with a point The stones forming the antæ are not bevelled

'The entrance doorway into cella is 7 feet 10½ inches wide Within the jambs on either side are sockets cut in the pavement for the door hinges There are mouldings round the jambs and lintel, and above is a cushioned frieze and very ornamental cornice The lintel is in three pieces, forming a flat arch, of radius 5 feet 8 inches, height of doorway in clear, 15 feet 2 5 inches

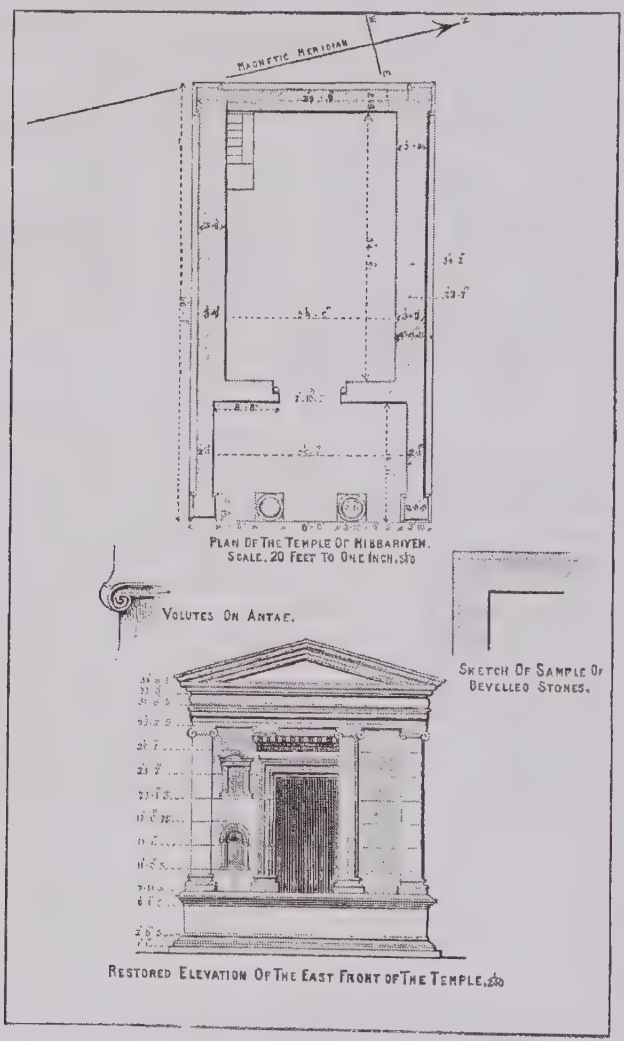
'Burckhardt says the doorway "has no decoration whatever"

'On either side of the doorway are two niches, an upper and a lower

'The lower niche occupies the second and third courses from the pavement, is 23 inches wide and 16 inches deep, being on plan semi elliptical It has pilasters on either side, in proportion, to support an arch The top of the niche inside is cut out in form of a shell.

'The upper niche is 25 inches wide, and is cut in square to a depth of 14 5 inches, it is 3 feet 8 5 inches high in the clear, and has a flat top on either side are columns supporting a pediment, the entablature of which is similar to that of the temple itself, but the capitals of the columns are a kind of Corinthian This niche occupies the 5-inch and 6-inch courses, and on the 4-feet course on the southern side of the doorway is a Greek inscription

The letters which remain are very sharply defined, but the greater portion is lost by the flaking away of the stone.


MAGNETIC MERIDIAN
PLAN OF THE TEMPLE OF KIBBARIYEH.
SCALE, 20 FEET TO ONE INCH.
VOLUTES ON ANTAE.
SKETCH OF SAMPLE OF BEVELLED STONES.
RESTORED ELEVATION OF THE EAST FRONT OF THE TEMPLE.

'The temple stands on a stylobate, which projects very slightly beyond it; the width of one being 29 feet 9 inches, and of the other 30 feet 11 inches. It is 8 feet high from the top

of cornice to bottom of base, and runs right round the building, so that there are no means of getting up to the entrance except by going into the stylobate at northern or western sides, where there are small entrances, one 4 feet 6 inches wide and 5 feet high, the other only about 2 feet wide. These entrances probably lead into the "spacious vaults" described by Burckhardt, and thence up on to the platform of the temple at the *western* end of the cella, so that they were probably entrances for the priests.

'Running round the inside of the building, pronaos, and cella, is an architrave on the same course and similar to that outside.

'The doorway is the same width from top to bottom. The stone of the building is the ordinary blue limestone of the country. There are cut on the cornice stones places for seven joists, 1 foot 11 inches in width, and 14 inches deep. The capitals of antæ could not be reached for measurement, the capitals of columns have disappeared.

'Aiha

'*Reference*—"Robinson's Later Researches," p. 431.

'Aiha is a village thirty minutes from Rashaiya, on the road to Damascus, height about 3,750 feet above mean sea level.

'The temple stands to the north of the village on the brow of the hill overlooking a small lake which dries up in summer-time. Nothing is now visible of the temple excepting the western end and part of the stylobate. The entrance apparently was towards the east. The bearing of the side of the temple is 78° 30', while that of the summit of Hermon is 195°, and the summit of Jebel Sunnin 353°.

'A portion of one of the antæ of porticum is *in situ*, its base is Attic, and stands on a socle 18 inches high. The four courses above the stylobate measure 18 inches, 2 feet 3 inches, 2 feet 4 inches, and 2 feet 3 inches. The stylobate is 5 feet 8 inches in height, it has a cornice and base similar to those of the Roman examples of the Corinthian order. The breadth of stylobate is 29 feet 4 inches. It projects to 2 inches beyond the antæ. So that the breadth of the temple, including the projection of the antæ, would have been 37 feet 8 inches.

'Houses are built over the site of the temple, and in one place the stylobate can be traced for 47 feet 2 inches, where it is now used as a stable. An entrance through this leads into vaulted chambers full of grain, and here we were not allowed to remain, for fear of setting the place on fire.

'Lying about near the temple is what appears to be a Corinthian frieze.

'There are also bits of architrave and other mouldings about. A column lying near measures 3 feet 3 inches in diameter.

'A stone with a Greek inscription is built into the west wall. Stone, blue limestone.

'DEIR EL ASHAYIR

'*References.*—"Robinson's Later Biblical Researches," p 437, "Land and the Book," p 350, "Murray's Guide," p 433

'A village situate on the north of the Hermon range, on one of the roads leading past Rashaiya to Damascus It is surrounded by low hills, and overlooks to the east a small plain, at the farther end of which is a sheet of water The temple stands in a conspicuous part of the village, the prospect from it to east is very fine, though limited in extent, and the situation is well adapted to the assemblage of large multitudes and the performance of religious ceremonies The estimated height of temple above mean sea-level is 4,050 feet

'The temple is of the Ionic order, its style probably *in antis* The entrance faces nearly due east, the magnetic bearing of the side being 94°

'The length, including the projections of the antæ, is 88 feet 3 inches, the breadth, 39 feet 8 inches.

'It is divided into two parts—the pronaos, 11 feet 7 inches by 32 feet 5 inches, and the cella, 46 feet 8 inches by 32 feet 5 inches At the western end of the cella is a raised platform, 8 feet 3 inches above the pavement of the temple This platform is supported by vaults, to which there are three entrances from the cella The platform is 22 feet 4 inches by 32 feet 5 inches

'On the inside of the pteromata are pilasters, projecting 4 5 inches, and 3 feet 1 inch wide, they are 5 feet 10 inches apart Their bases rest upon a cornice running round the cella, the top of it on a level with the floor-line of the raised platform Small Corinthian capitals were lying about the cella, and appear to have surmounted these pilasters The bases of the pilasters are Attic The antæ are 4 feet 3 inches wide at bottom, and diminish up to 3 feet 10 inches They measure in height about 38 feet, including capital and base There are in this thirteen courses, averaging each 3 feet in height The entrance doorway runs up to the top of the seventh course, and is about 21 feet high in the clear, and 11 feet 10 inches wide

'One of the antæ to south-east still remains *in situ*, and part of the wall of the building all round, but every bit that has fallen has been carried away, except the capitals of the antæ, and no appearance of the entablature could be found anywhere about. The columns, also, and bases are gone, but it is likely that the temple was *in antis*, and not prostyle

'The temple is mounted on a very handsome stylobate, with cornice and base mouldings, somewhat different to the ordinary Roman type, and running round the cornice is a blocking 3 feet high, forming a parapet to the platform round the temple This space is 9 feet wide at the sides and rear, and 21 feet in front The stylobate is 11 feet high, and stands on a plinth 6 feet high at one point, but probably this latter may not run all round at this height To south and east houses, but on to the stylobate, so as almost to conceal it The total height of temple, from cornice to stylobate, was probably about 45 feet to 46 feet

'This temple also has the peculiar character of having no steps up to its platform, the stylobate running all round without a break The stylobate has, probably, vaults in it, and there appeared to be an entrance to them from the east, but admittance could not be obtained This is, possibly, the village granary The method of entering the temple for the priests is, too, apparent, but, as at Thelthatha and others, it is likely they went in through

the stylobate No appearance of mortar or cement could be seen The stone is of the mountain limestone obtained hard by, and assumes by exposure an extremely blue appearance The stones are not bevelled No inscriptions were found about the temple, but a few feet to front is a pedestal lying on the ground, on which is a Greek inscription A squeeze was made of this

'RUKHLEH

'*References*—Burckhardt, p 49, "Robinson's Later Researches," p. 437, "Land and the Book," p. 350, "Murray's Guide," p 432

'Rukhleh lies a little out of the road from Katana to Rashaiya, about three hours from the latter, it is in a nook in the hills Height, about 4,780 feet above mean sea level

'There are here the remains of two temples about 150 yards apart, the upper one to the south west is a shapeless mass of ruins, but there are Greek inscriptions lying about. The lower temple to north-east is that which has been described by Burckhardt and others This temple, which was once a very handsome structure, is now very difficult to examine, because it has had an apse stuck on to the eastern end, and the architrave of the original entablature appears to have been used to form door-jambs for the west end of the altered building

'The impression I have is, that it originally was a temple with entrance to east, and afterwards turned into a church with entrance to west This is a very important point, as it is probable that the finding of this temple with entrance to west, while temples west of Hermon have their entrances to east, may have first given rise to the idea of Hermon being the kiblch of these temples It is to be observed that the other temples near Rukhleh—viz, Deir el Ashayir and Atha—have their entrances to east, as have all other temples I have seen in the country on both sides of Jordan

'The temple lies south-east or north-west, the bearing of the side being 127°, while that of Hermon is 231°, so that one side (that on which are the head and eagle) faces towards Hermon within a few degrees; but this is probably mere accident, as I think the head occupied the tympanum of the west pediment in the original building, and would thus have faced in another direction

'The temple as it now stands is from 56 feet to 59 feet broad, and measures 82 feet 10 inches from west end up to where the apse commences, but there are traces of the wall having continued further east by 18 feet

'Little more than one course of the wall still remains above ground, and it seems doubtful if any of it is *in situ*, except the portion of the antæ at north west angle

'The *face* is well described by Robinson, and he suggests it may have been that of Baal, however that may be, it is not likely that it was originally in its present position, just where the cornice of the stylobate would have been

'The eagle was not seen by Robinson, it is described by Burckhardt The stone on which it is sculptured is now broken in two, and lies over at an angle so as to be very difficult to find To me it appears to be of a type essentially Assyrian, and is of a blackish stone (not basalt), quite different to those of the building, and has probably been brought from a distance A squeeze of a portion of the bird has been taken

'The building has two rows of columns running up the interior, there are three in each

row, and they are equidistant from each other, and form the outside of the side walls, they are 19 feet apart from centre to centre, the lower diameter is about 2 feet 8 inches

'The capitals are Ionic, and are ornamented below the volutes in a manner similar to those at Deir el Ashayir

'The apse measures 22 feet 5 inches across inside, it is 13 feet 10 inches deep, and is nearly semicircular on plan, the walls are 2 feet 5 inches thick

'Two columns of larger diameter than those already referred to are cut in for the resting of part of the wall of the apse, and this proves the apse to be of later construction The diameter of these two columns is 3 feet 2 inches

'On the southern side wall there appears to have been a small door On the northern side wall *debris* has accumulated Perhaps if an excavation was here made, the stylobate might be uncovered

'Three of the door-jambs are probably formed from the original architrave of the entablature it appears to have been the lintel of a doorway Two pieces of stone stand up in an odd, isolated manner a few feet in front of the entrances They appear to have been part of the entablature The antæ appear to have been 3 feet 6 inches wide at west end, bases Attic

'A restoration could probably be made of the original temple, if some little time was spent in examining the fragments Close to the eagle there is a Greek inscription, of which a squeeze has been taken

'BURKUSH.

'*Reference*—Burckhardt, p 50

'It lies a little to the south of the road leading from Rashaiya to Katana, about four hours from the former, height above mean sea-level, 5,200 feet It is on the extreme verge of the Hermon range to east, and looks down upon the great plain a thousand feet below it

'Ruins abound in the neighbourhood but the principal object is a rocky ridge running north east to south-west for about 300 yards On the summit a plateau has been levelled, and at the south west end the requisite height is obtained by great substructions of heavy masonry

'The buildings here appear to be of different epochs At the north-east end is a small Roman looking building, which has had an apse added to it, at the south-west end is a huge pile, forming a platform 120 feet by 159 feet 6 inches, on which a Byzantine building has been erected Between the two, for 175 feet, the foundations of out-buildings cover the ground

'The great platform will first be described It measures 159 feet 6 inches from north-west to south east, and 120 feet from north east to south-west Towards the north the rock cropped up above the level of the platform has been cut down, and where it could be done, the piers of the superstructure have been cut out of it To the south, the rock falls very rapidly, until, at the southern end, it requires 40 feet of wall to bring the platform up to the required height

'The principal substructure is a long chamber, running the length of the building and 19 feet 5 inches wide, over this a series of arches have been thrown at intervals of 4 feet 1 inch, each arch being 2 feet 1 inch across, and the platform of the temple has been formed by throwing flat slabs across from arch to arch These arches appear to have been semi-

circular on the outer side, where a thrust would have been dangerous, but on the inner side they are segmental. The skewbacks, however, on the outer side are made for segmental arches, so that two lines for the intrados are shown on the section. The walls here are 5 feet 5 inches thick, the courses are generally 3 feet 7 inches to 5 feet 8 inches, as in the Haram wall of Jerusalem. There are other chambers, which have regular barrel vaults over them, and other and smaller chambers have corbels, and are roofed with great flat slabs, as at Thelthatha. These chambers appear to have been used as store-rooms, and one of them is a bath-room.

'The wall at southern end is 40 feet in height, there are twelve courses, including the blocking course, the cornice is the cyma recta, common to the buildings about this part of the country. Houses are built on the north east side of the building, and the vaults are used by the villagers. A great number of the stones in the building have the masons' marks on them, Greek letters.

'The platform appears to have been occupied at a late date by a Byzantine basilica; a great number of capitals are lying about, and all differing in style and shape, some of them are fantastic in their appearance. There are two rows of piers still standing, these are 9 feet by 3 feet, and have engaged columns at their ends. They run in the direction of the length of the building. The two rows are 35 feet 6 inches apart, and the piers in each row are 36 feet 6 inches from centre to centre. These piers stand 16 feet 9 inches high, exclusive of the capitals, there are seven courses, about 2 feet 6 inches each, the bases are Attic, the skotia being filled up. One capital appears to be similar to those at the Golden Gate, Jerusalem. Lying down outside the building is an exceedingly handsome Ionic capital, of a much earlier period. I am under the impression that there was a building on the platform previous to the erection of the basilica. This place must have been of considerable importance in early Christian times, for the erection of such a large basilica, and it would be interesting to discover whether Eusebius does not mention a large town near here.

'The building 175 feet north of the great platform has its entrance towards the basilica, it is 64 feet 9 inches by 35 feet 3 inches. It seems doubtful whether it was a temple, perhaps a hall for some secular business. It has, however, apparently been used afterwards as a church, as the apse end has evidently been put in at a later period. The side walls are 3 feet 10 inches, the front wall 4 feet 9 inches, the rear wall is in confusion. There are eight courses remaining, measuring 25 feet in all, and varying from 2 feet 8 inches to 5 feet 6 inches. The door is 9 feet 10 inches high, and 6 feet 6 inches wide, on either side is a column on a pedestal, supporting a pediment, the capitals appear to be Corinthian. This building has nothing in common with any of the temples found about the Lebanon. The magnetic bearing to Rukhleh from here is 349°.

'ZEKWEH.

'*Reference*—"Robinson's Later Researches," p. 494.

'This village lies on the western side of the Bukâ'a, just up in the hills, about 100 feet above the plain, and 2,250 feet above mean sea-level. The temple occupies the centre of the village, and, though small, is conspicuous for miles round. It is about two miles south of Mejdel Anjar.

'The temple lies north-east and south-west, the entrance to the north-east, the magnetic bearing of the side is 59° 30'. It is now used as a house, the flat roof of which prevents the interior being seen much below the capital from the outside, the roof is gone, of course, but the side walls are intact, and also the entablature and pediment of the western end

'The temple prostyle measures in length 39 feet 10 inches, in breadth 23 feet 6 inches, height, from cornice to base of antæ at bottom, 21 feet 9 inches The portico is 6 feet 6 inches wide from end of antæ to centre of columns, the pronaos is 7 feet 4 inches by 19 feet 5 inches, the prolongations of the side walls are 2 feet thick

'The cella is 19 feet 4 inches by 28 feet 5 inches, the side walls are 2 feet 1 inch thick, the west wall 1 foot 7 inches, and the east wall of cella 2 feet 4 inches It cannot be seen from outside whether the west end of the cella was raised or not above the floor of the temple

'The temple is of the Corinthian order, but the leaves on the capitals have not been carved, beyond showing their bare outline The antæ are 2 feet 0·25 inch square, they hardly project beyond the wall of the temple, except at the capitals, it is doubtful whether they do project at all The bases were not observed, for capitals, see Fig 3 in tracing The columns (monoliths) are 13 feet in height, the capitals are similar to those of the antæ, diameter of columns just below the capitals, 1 foot 9·5 inches, the two middle columns stand 8 feet 6 inches apart from centre to centre

'The architrave resting on the capitals is the same inside and out, and has mouldings underneath There are seven courses in building between the entablature and floor of temple, measuring together 16 feet 9 inches, and individually being each about 2 feet 6 inches in height, on the side walls, on the capital course, at 3 feet 6 inches from the capitals of the antæ at west end, are ornaments The stones are all stretchers in the wall, except just at the ends, and measure from 8 feet to 10 feet in length they form the thickness of the wall, bevels are partially cut on some stones. The stones are cut from the ordinary blue limestone The entrance doorway, if still existing, could not be seen

'The entablature is about 5 feet in height, but it is not certain whether there was not an error in the measurements of the cornice, so the figures are left out

'The architrave and frieze are in one piece the former is very plain, the latter is pulvinated, and projects about 2 inches

'On the cornice on either side are three lions' heads one of them is only 2 feet from the west end

'The rise of the cornice of the pediment is 17½ inches in 3 feet 2½ inches

'Within, on the west wall, on the capital course, is some sculpture

'KUSUR NEBA

'*Reference*—"Van de Velde's Plan"

'This village lies on the eastern side of the Bukâ'a, about 5 miles north of Zahleh It is elevated about 500 feet above the plain, and is about 3,600 feet above mean sea-level The temple is situated on the southern side of the village Only the stylobate and three courses remain *in situ* It is partially occupied as a habitation

'The temple lies east and west, the entrance to the east The magnetic bearing of side is 81°, while the bearing to Baalbec is 69° 30'

'The temple prostyle measures in length 90 feet 4 inches, and in breadth 46 feet The portico is 12 feet 8 inches wide, from end of temple to end of plinth of column The side walls are 4 feet 5 inches thick There are no antæ at west end Only three courses now remain these measure upwards 3 feet 2 inches, 4 feet 5 inches, and 3 feet 2·5 inches They show that the side walls were broken by seven pilasters, including the antæ to east, projecting 4 5 inches, each about 5 feet wide, and about 7 feet apart

'These courses do not lie flush one over the other, but recede and project again, as at Husn Niha

'The plinths of the columns measure 5 feet 11 inches square The columns, perhaps, measure 3 feet in diameter, and were 12 feet 2 inches apart from centre to centre at each side, leaving an opening in front of entrance of 16 feet from centre to centre The bases were Attic, and cornice Corinthian

'The stylobate is 9 feet 10 inches in height It has a base and cornice, very plainly worked

'NIHA

'*Reference*—"Land and the Book," p 61

'Situated in a glen on the west side of the Bukâ'a, about 4 miles north of Zahleh, it is about 250 feet above the plain, and 3,300 feet above mean sea-level

'The temple lies to the west of the village, the entrance is to the east, but the bearing of the side was not booked, probably it bore some degrees to north of east There are a good many ruins about, and the temple itself is nearly completely destroyed

'It was probably very similar to that of Husn Niha Very few measurements could be taken, on account of the lateness of the day when it was visited

'The temple was probably prostyle Length, 122 feet, breadth, 57 feet, pronaos, 27 feet 7 inches by 45 feet 6 inches, the projections of the lateral walls being 6 feet 2 inches thick The cella, 81 feet by 48 feet 4 inches, the lateral walls being 4 feet 4 inches thick, the west wall, 3 feet 6 inches, and the east wall of cella, 9 feet 6 inches

'It will be seen that the west wall is very thin, this, probably, on account of the west end of temple running into the side of the hill The thickness of the transverse wall between cella and pronaos was probably required for the purpose of winding staircases in wall, as at Husn Niha

'On each side of the cella are six engaged columns, about 4 feet in diameter, and at the corners to east, and possibly also to west, are double engaged columns, as at Husn Niha Some of the courses in the wall measure 3 feet 11 inches, 5 feet 8 inches, 3 feet 8 inches, and 4 feet 3 inches in height They form the thickness of the wall, and a few of them are bevelled Some large bevelled stones are lying about, but it is difficult to say whether they formed part of the temple

'The architrave is the same as at Husn Niha, also the capitals, except that the carving has proceeded further

'The temple was built on a stylobate, and probably had steps up to it, as at Husn Niha All this is a confused mass of ruins Altogether this temple appears to have been of the

same style and size as that of Husn Niha, but the workmanship is of far better quality, and everything substantial and solid

'The lintel of the doorway has a very handsome hypertherum, and the course on which are the base mouldings of the engaged columns inside has also a moulding running round the outside

'On the face of one of the stones is the bust of a woman in relief—full sized, well carved

'Nakleh: a village on east side of Bukâ'a, about five miles north of Baalbec

'Only the stylobate and two courses remain at east end Temple lay east and west—entrance to east, bearing of side of temple, 95°, breadth of stylobate, 69 feet 10 inches, of temple, about 42 feet

'Height of stylobate and plinth, 17 feet 7 inches, courses of temple, 2 feet 11 inches and 3 feet 7 inches

'Husn Niha

'*References*—Burckhardt, p 29, "Land and the Book," p 61.

'This temple stands in a glen about 3 miles above the village of Niha It lies east and west, the entrance to east Magnetic bearing of side, 83° 30', height above mean sea-level, 4 200 feet

'Burckhardt says the temple faces to the west

'The temple is on plan prostyle, and measures in length 80 feet 7 inches, and in breadth 41 feet, including the projections of the antæ The height from top of cornice to top of platform of stylobate is about 37 feet 6 inches The plinths of the columns are 5 feet 9 inches square, and are separated from the antæ by 7 feet 2 inches. The pronaos is 12 feet 9 inches by 38 feet 6 inches, the productions of the side walls being 3 feet 9 inches The cella is 58 feet 10 inches by 37 feet 3 inches, the side walls are 4 feet 4 inches thick, the west wall 4 feet 5 inches, and the east wall of cella 4 feet 7 inches The west end of cella is raised up above the floor of temple No chambers were found beneath the raised portion of the cella On either side of the cella, inside, are four engaged columns 4 feet in diameter, and about 11 feet apart from centre to centre At the angles are double engaged columns, these have something in common with those in the synagogues of Galilee [See Captain Wilson's paper in "Quarterly Statement," No II] These columns have Attic bases resting on a cornice, the top of which is 7 feet 7 inches above the floor of the temple, and which runs round the wall of the cella The capitals of these columns are Ionic

'The temple on outside is of the Corinthian order The antæ to each present a very curious appearance, in consequence of the courses of the temple wall being let in and moulded. The course above the base course diminishes from 5 feet 5 5 inches to 5 feet 1 5 inches, the third course has mouldings on it, but is generally 5 feet 11 inches thick, the fourth course is 5 feet 11 inches, and fifth course only 5 feet 1 inch, sixth and seventh the same, but the seventh diminishes still to 4 feet 7 inches, and then comes the capital This is of the ordinary Corinthian, but the carving of the acanthus leaves has never been continued beyond the bare outline The antæ at the west end project 4 5 inches beyond walls The base shown on anta is that which runs round the side walls, it was not noticed whether it is also the same on the antæ

'Diameter of columns at base, 4 feet 5 inches; at the upper end about 4 feet. The bases of columns were not seen. The capitals are similar in detail to those of the antæ.

'Between the entablature and stylobate there are seven courses in the wall; they differ very much in height, from 3 feet to 6 feet, in all they measure 32 feet 6·75 inches. They are not bevelled. They do not form the thickness of the wall, but lie on edge, generally two of them, and are cramped together.

'Thus stones 6 feet high are not more than 2 feet thick in many cases. The entrance doorway into cella is about 15 feet 6 inches in height, and 11 feet wide. It has an architrave moulding round it, rather peculiar.

'Within the thickness of wall on north side of doorway is a winding staircase, cut out, leading apparently to the roof.

'At the west end of the cella is an upright projecting moulding, probably it has something to do with an image.

'The architrave and frieze together, in one piece, measure 5 feet 1 inch in height, the frieze is 2 feet high, and is pulvinated.

'The cornice could not be measured with any accuracy, it is about 4 feet 4 inches in height.

'It has lions' heads on the cyma.

'The temple stands on a great stylobate, with a very projecting cornice and base. On plan the outer edge of the cornice is shown. this projects about 2 feet 10 inches beyond the antæ. The stylobate is 10 feet 8 inches in height. It runs round three sides of the temple, but on the eastern side it is produced 28 feet beyond the portico, and runs 6 feet along east side from each angle, and the remainder of the space is occupied by a flight of steps, eight in number. These diminish in width from bottom to top, the bottom is level with the top of base mouldings of the stylobate, and the top with the floor of the temple.

'The mouldings of the stylobate only continue for a few feet from east end, the remainder is quite plain, with a simple projecting cornice and base.

'The stones of the building are of sandstone and limestone.

'This temple is one of the largest next to Baalbec, but it appears to have been built with an eye to making as much show with as little expenditure as possible. The mouldings terminate wherever the eye is not likely to catch them, and the stones of the wall stand on their edges in a most dangerous fashion, the strength of the wall depending upon the strength and ingenuity of the cramps which join the slabs together.

'Kurnet esh Shukif (Belfort)

'*References.*—"Robinson's Later Researches," p. 50, "Murray's Guide," p. 538.

'This castle has been so well and fully described by Dr Robinson, that there is no necessity to do more than add a few remarks. He quotes the length as being 800 feet, and breadth nowhere more than 300 feet, and it does not appear that he took any measurements himself. My measurements give the length of the building from north to south as less than 400 feet, and from east to west 100 feet, except at the northern end, where there is a projection to east of about 70 feet. The courtyard to east of castle is about 50 feet wide, and the outhouses another 50, so that the width of the whole range does not appear to be any-

where more than 200 feet This does not include the batter of the walls, which slopes down perhaps at 60° This would increase the width by 20 feet to 30 feet. The castle lies nearly north and south, the outhouses being wholly to the east, and hanging over a steep descent, running sheer down to the Kidron, 1,500 feet below

'The ditch or moat cut out of the rock is about 70 feet wide to west, and 120 feet to south It did not appear to me that this had ever been a wet ditch, but to the north of the castle is a large excavated quarry, which may have been used as a reservoir In the counterscarp of the ditch are rock-cut cisterns, to which the people from the village below have recourse for their supply of water

'No signs whatever of any Phœnician remains could be found either about or in the walls of the castle The earliest part of the building appears to be very late Roman or Saracenic, some of the doorways are very similar to those at Saida in the See Castle

'It was extremely difficult to take measurements for the plan of the building, on account of the batter of the wall at bottom, and its ruinous condition at top, which made it dangerous to keep near the edge, add to this, the day was stormy—the first sign of a break-up in the Lebanon summer had appeared, a strong wind was blowing, and the stones were slippery with rain The plan made under the circumstances is only an imperfect sketch Some of the sides were measured, others not, and a few of the measurements have got blurred out by the heavy rain that was falling

'The southern end of the castle was not so high by one story as the remainder, here there were two semicircular towers butting on to the walls at the angles to south-east and south-west, diameter of each about 30 feet All the chambers in the castle are vaulted, and the roof flat, and from the lower roof, where are the circular towers into the upper story of the castle, there is an entrance covered by an arch This is in three rings the outer one is nearly semicircular, and may be 11 feet 6 inches span, but it is concealed by rubbish, the second ring is a slightly pointed arch, the third ring is also a pointed arch, it is recessed in behind the other two, so that its face is 2 feet 10 inches behind them, and in front of it is a space 12 feet wide, cut for a portcullis to drop behind the huge arch and in front of the small one The portcullis was about 9 feet 9 5 inches wide, the wall here is 4 feet 8 inches thick The stones of this arch are well cut, with bevels or drafts 2 inches wide, and it has a handsome appearance

'The semicircular towers must have added very much to the beauty of the castle They are built of stones 2 feet high, with faces rough picked, and smooth marginal drafts sunk 4 inches to 5 inches, and 3 inches to 4 inches wide The upper portions of these towers are perpendicular, but at a certain level, the same as on the main building, the walls begin to batter down at an angle of perhaps 60° The stones in this are also carefully drafted, and at the top of the batter a handsome moulded string course runs round the towers The western and northern portions of the castle are built of the same kind of bevelled stone, but to the east the wall has been renewed with a smaller squared stone of a later period

'It is difficult to see why this comparatively modern castle should have been described as being Phœnician

'At the north west angle is a Machicoulis window, which at first I supposed to be the latrine, but it appears likely to have been an entrance by which provisions could be drawn with safety. At Marsaba, at the present day, a window of this kind is in constant use, even while the main gateway is left open

'In the tracing is a gateway at the north-east angle, it has, first, a lintel, and then a flat

relieving arch This latter is composed of three stones, but the bevel is cut in a curious fashion, so as to represent an arch of seven stones The drafts are sunk in an inch, and are 2 inches to 4 inches wide Above is a sunken place in the wall 3 feet high and 4 feet long, where a metal plate with an inscription has probably once been. Round this there is an ornament made by sunken discs 3 inches in diameter, and the same distance apart

'On the top of the castle are built two chambers—that to the west measures 42 feet by 30 feet The doorway (Fig 3) is 3 feet 10 inches wide, and has a lintel, and over it a relieving arch of three stones, the stones have drafts of about 1·5 inches wide, which are sunk 0·75 inch, above is a rectangular space sunk into the walls, where a metal plate with inscription may have been

'The chamber to the east measures 38 feet 4 inches from north to south, and 29 feet 10 inches in breadth It is a mediæval chapel, and has a handsome doorway A plan is given of the mouldings of the arches, but below the imposts the stone had fallen away On one of the stones, on the bed, a mason's mark was observed—a rude *tau* or cross. The walls of the chapel are 3 feet 10 inches thick, the interior is divided laterally into two bays, covered by groined pointed arches The voussoirs lie at an angle of ¼

'*Note*—With reference to the plans of the temples, I must do the work and myself justice in stating that the details of mouldings cannot be considered as strictly accurate The measurements were taken under an endless variety of adverse circumstances—sometimes lying on my stomach, head downwards and heels held, I booked my own measurements In other cases the stones were half-buried in the ground, or hidden under other stones, so that the eye had to be depended on in getting a perpendicular line Under the circumstances, I do not for a moment suppose the details to be accurate, though they are just as they measured, still, they give a near idea of what these mouldings are. In those cases where there is an appearance of error the measurements are not shown on plan

'The want of a photographic apparatus has left much of the ornament unheeded

'Ain Hershah

'*References*—Robinson and Thompson both mention the existence of a temple here, but no description is given

'Ain Hershah is a village situate on the west side of Mount Hermon, between Hasbaiya and Rashaiya, about two hours from the latter, elevation about 3,050 feet above the Mediterranean The temple is about a mile further up the hill, at an elevation of 3,600 feet, at the top of a steep wâdy What appears to be the summit of Hermon can just be seen from it The entrance to the temple faces due east (90°), while the bearing to the summit of Hermon is 134 The temple is very small, and is in very good preservation, the walls, however, are a good deal shaken, apparently by earthquakes It is *in antis* of the Ionic order; length 42 feet 4 inches, breadth 24 feet 1·5 inches, height from top of cornice to platform of temple, 19 feet 3·5 inches, the pronaos is 8 feet 4 inches by 19 feet 5 inches, the cella, 26 feet 10 inches by 17 feet 2·5 inches The western portion of the cella is raised 3 feet 4 inches above the floor of the temple for 9 feet 2 inches On this stand four pedestals supporting engaged columns, two on the end wall and one on each side The bases are Attic, the capitals Ionic, on the capitals rests an architrave, which only goes as far east as 9 feet 2 inches, the cornice above it runs round the wall of the cella.

'There are no vaults in this temple, the void spaces being covered over with slabs of stone, which have in most cases been broken through by the fall of the roof, and present to the eye a very confused appearance.

'The temple rests on a stylobate, which is 8 feet high at the western end, but runs in to nothing at the eastern, on account of the rise of the rock to east In the cella, two piers run down the length, to support the flagging for the pavement, which is 14 inches thick The entrance doorway is 10 feet 6 inches high in the clear, and 6 feet 10 5 inches wide at bottom, and 6 feet 6 inches at top It has mouldings around it, and is handsomely ornamented over the lintel The diminution in opening from bottom to top I think to be accidentally caused by the shakings to which the building has been subjected, inside the door-jambs are sockets for the door-hinges, cut in the pavement, 4 inches in diameter The antæ measure 2 feet 6½ inches by 1 foot 10½ inches in front, in rear they are 2 feet 2 75 inches by 1 foot 10 5 inches The columns are 1 foot 10 5 inches in diameter near the base It was not observed whether the antæ diminish from bottom to top

'On one side of the doorway is a niche The capitals of the antæ have the flat faces of the volutes towards the east and west, and the curved sides to the north and south, in this they differ from Thelthatha, where the four faces of the capitals have a uniform appearance

'On the cornice on each side are three heads, a lion on each side and a tiger in the middle. On the west end, on the tympanum, is the bust of a woman in bas-relief, she has two small horns on her head, and her breasts are exposed, as in the figures of Venus at Cyprus. Below this, about the centre of the west end-wall, is a square of 6 inches side, with a right-angled triangle on the upper side, apparently the model of a temple There is a Greek inscription on the rocks hard by

'There are five courses between the entablature and pavement, they measure collectively 15 feet 0 75 inch, and each course is nearly 3 feet in height.'

NOTE ON THE MOUNDS AT JERICHO

'Mr Horatio Bland, writing to Dr Chaplin from Delhi in January, 1869, gives an interesting account of the mounds that are to be found there He says "In driving out of Old Delhi, which adjoins the present city, my attention was attracted by some mounds to earth having exactly the same appearance as those at Jericho, and I asked what they were, the answer was that they were the result of burning bricks in stacks, in this way—a stack of bricks was set up and burnt, and when the burning was completed the good bricks were taken away, and the bad ones and the rubbish were levelled down, and a fresh stack raised thereon and burnt, until at last, by a repetition of the operation, the present mounds of earth were raised Sometimes the ancients built upon these mounds, so that ruins of buildings are found mixed up in them Indeed, here there is a very handsome bungalow built on such a mound I passed, a little way off the road, one of these mounds, and walked over it It is of irregular shape, varying in height from nothing to 70 feet and 80 feet, and covering perhaps 6 acres of ground In every respect it has the appearance of the Jericho mounds; may they not all have the same origin?

'"In the account I gave of the results of our excavations in the Jericho mounds ('Notes on the Valley of the Jordan, and Excavations at 'Ain es Sultan,' p 14), I said, 'The general

impression given by the result of the excavations is, that these mounds are formed by the gradual crumbling away of great towers of *sun burnt* brick'

'"If we had found the interior of the mounds at Jericho to be composed of fire burnt bricks, I should feel no doubt about their being of the same origin as those at Delhi But as they all appear to be sun-dried, and were quite soft and crumbling, I doubt if they ever had been put in a kiln, I must, however, observe, that some of the pottery found, and which I suppose had once been baked, crumbled into dust directly it was exposed to the air. The question of the origin of these mounds is one of very great interest, there are a great number of them in the Buka'a of Cœle-Syria, as well as in the Jordan valley, and I also thought I could see some on the east of the Huleh The fact that in the Jordan valley these mounds generally stand at the mouths of the great wâdies, is rather in favour of their having been the sites of ancient guard houses or watch-towers"'—Captain Warren, 'Quarterly Statement,' 1869, pp 183—210

OUR SUMMER IN THE LEBANON, 1869

'HAVING, through Dr. Brigstocke's assistance, made the necessary arrangements at Beyrout, I returned to Jerusalem to bring our party away

'Sergeant Birtles, who had already had two severe attacks of fever during the spring, was obliged to remain on with his family

'The other three non-commissioned officers were to follow us after three days, and separate at Jaffa Corporal Ellis to return to England, invalided, the other two to come on to Beyrout.

'We arrived at Beyrout on 30th July, and by next steamer, 2nd August, Corporal McKenzie arrived alone, for Corporal Cock, having had a relapse of fever the night before his intended departure, had been ordered to keep to his bed We went up to 'Aitat, where our house had been taken, on 2nd August We arrived past 10 p m Our mules had only just arrived before us, and our party was tired and jaded. As we were groping about in the dark, a pleasant voice behind us asked if Lieutenant Warren was there On my answering, the voice said that its owner had been waiting for us on one of the roads since dusk, and that all we had to do was to come over to his house, where beds and supper had been prepared for us We found our good host to be Dr Bliss, President of the American College.

'This little episode is only a specimen of the hospitality towards strangers which we experienced from the kindly Frank community at Beyrout, and which caused us, after our three months' stay, to leave with lively regret

'I was now waiting anxiously for a telegram with regard to Corporal Cock, expecting to be summoned back to Jerusalem, but by the next mail he appeared in person, looking very much shaken and quite unfit for work By the end of the month he was pretty well again, and I made arrangements to go and examine the temples about Hermon But in consequence of the state of the finances of the Palestine Exploration Fund, we were to cut down expenditure For this purpose we took no cook or dragoman, but Corporal McKenzie catered for us, and Corporal Cock acted as cook and copied plans.

'We left Aitat September 7th, Corporal Cock with the baggage going round by the carriage-

road to Kubb Elias, and thence across the plain to Rashaiya I went straight across the hills by Muktarah, and had a letter of introduction from Mr Eldridge to the chief there Almost the last words I heard before leaving Aitat was advice to look out for the lion It referred to a story which had been current in the Lebanon for some weeks with regard to some wild beast which had carried away people from a village to east of Hermon A gentleman of much experience in the country had investigated the matter, and learnt that on the Euphrates a canebrake had been fired by some Bedouin, and several lions had been dislodged, and had separated over the country, and one of these was supposed to have located itself near this village to east of Hermon, and was said to be carrying off the children Of course, there were several versions of the story, but the general drift was to that effect

'We had engaged our horses to take us only to Rashaiya, where we were to stop and ride mules or donkeys, or walk, as might be most convenient, to the places of interest in the neighbourhood A friend from England had recommended walking, but his experience had been gained in the country during the winter season At Beyrout I was told that walking in the summer-time would be rank folly, and, though I have found that walking tours in the summer-time in the same latitude in Spain are quite practicable and pleasant, yet I incline to the same opinion as my Beyrout advisers, and think that Syria is not a good country for a summer walking-tour, if one has been at all pulled down by the climate. The Lebanon, except in very elevated spots, cannot be called cool in summer, on the contrary, at the same elevation, the average temperature is, I think, greater than at Jerusalem But its healthiness is so very much greater that many people seem to take it for granted that it is cooler The heat of the sun is intense, and in walking a constant perspiration would result, which, being frequently checked by the wind when rounding the spurs of the hills, would be followed generally by fever

'We arrived after dark at Muktarah, and rode up to the residence of one of the chief Druse families of the country My letter was addressed to the widowed lady who presides here during her son's minority, and it is needless to remark on the hospitality with which I was received My chief difficulty was to explain that I could not stay there the twenty days which the politeness of the hostess fixed upon as the length of my visit, and it was with some trouble that I obtained permission to start next morning at sunrise

'From Muktarah (September 8th) we were to take a straight course to Rashaiya, over a road but little travelled Our hostess insisted on sending a cavass to act as our guide, and without him for the first few miles we should have had great difficulty in finding our way We did not leave till 6 45 a m We crossed (see Ritter, xvii 94) the rushing stream which gives such green life to this little valley, and then began to ascend by a very steep and rugged path to Kureibeh, a village, this we reached at 7 45 a m The estimated height, 3,170 feet We were now among hills, bleak and desolate enough, and I congratulated myself on having sent the baggage round by an easier way, for the path was quite unfit for the mules Our guide showed me a place where a mule, laden with tobacco, had rolled down about 200 feet, and had escaped unhurt At 8 10 we got on top of the ridge, 3,780 feet, and had to lead our horses down a very steep descent, for 300 feet, when we got into a wâdy, and then began to ascend again the mountain side, and at 8 40 a m reached 'Ain Yakûty We continued up the side of the hill, and at 9 25 a m reached the ridge at 5,170 feet, the highest point in this pass From hence the view to east of the Buka'â and Antilebanon is magnificent Hermon lay over against us, quite bare of snow, with the exception of two small specks The mountain seemed to have only one culminating point, and its height was increased in

appearance by two horizontal streaks of haze, which lay the one about 500 feet below the summit, the other about 200 feet below, and stretched for miles north and south This was not a favourable sign for our getting a good view from Hermon, for, however clear it might be from the summit in a horizontal direction, we should see nothing but dim outlines, when looking down at the country below, through those two layers of haze Between us, and hiding the base of Hermon, lay the range of hills separating the Hasbâny from the Litany, they stretch north as far as Jubb Jenin, and to south become merged in the hills of Galilee. They reach in height to about 2,000 feet above the Litany, and only 1,000 feet above the Wâdy et Teim, in the same latitude, that is to say, the bed of the Wâdy et Teim is in the same latitude, nearly 1,000 feet above that of the Litany, and this while the latter is still in the plain, and before it has commenced to cut its way through the hills by Kulat esh Shukif This is a satisfactory reason for the waters of the Buka'â flowing in this direction instead of into the Jordan I shall have occasion to refer to this matter further on Our guide told us that the path we had just followed was impassable in winter, and that then people from Muktarah went round by Jezin I may mention that in summer time, by the absence of snow, the Lebanon is greatly shorn of its glory, and that for views alone the spring is probably the best time, but for the examination of the country, no time can be better than September, when all vegetation is parched up, and when almost everywhere grapes are given even without asking for them We now descended, again leading our horses, and arrived at Sughbin at 10 35 a m Near this village there is a most delightful spring of the purest and most icy cold water At 11 a m we had got down to the bridge over the Litâny, at a height of 2,575 feet It has masonry piers, and sticks and mud are stretched across, it looks very insecure Every here and there was a hole where a horse's foot had gone through We now crossed a slight track of dried-up meadow land, the continuation of the Buka'â, and began to ascend the chalky-looking hills to a village with a significant name—Baalul, arrived 11 50 a m, and at noon got to the 'Ain, at 3,650 feet We could hear nothing of any ruins about At 12 25 p m, on ridge of hills at 4,450 feet, and descended to Rafid, here we arrived at 1 15 p m, and remained till 2 20 p m We were now only a few feet above the plain of the Wâdy et Teim, which here is about 400 yards wide We started, and at 2 45 p m were at what appeared to be the bed of the wâdy, at 3,050 feet, got among broken ground, and leaving Dahar el Ahmar to our left, were at the foot of ascent to Rashaiya at 3 40 p m, at 3,250 feet A few minutes brought us up to the pond at the village, at 3,750 feet I called at once on the Modir, and presented my letter He turned us over to the tender mercies of a Protestant schoolmaster, who turned out to be a very worthy gentleman, one of the few natives I have met with in the country who would give a straightforward answer, and tell honestly the price of provisions, hire of mules, etc He first took us to the schoolroom, and produced coffee and pipes, and got ready a 'spread' for us While he was doing this, we went off with a guide he had recommended, named Abdullah, to search for rooms to hire for our fortnights' stay This man was of the same church, and accordingly took us only to little dingy houses, belonging to co religionists, for they are mostly poor here Seeing his game, I declined to go to any Protestant house, when he took us to the house of a Greek butcher, who had two large rooms and two small ones I hired one of each for a fortnight, and returned to the school. Our food was now ready, served all in one dish, with bread to scoop it out In the evening, several people came to see the lever, lifting-jacks, etc, which we had brought, and decided that one was a new kind of revolving gun, and eyed it with much suspicion

'*September 9th*—My servant had returned to Aitat early in the morning, and we were thrown entirely on our own resources Luckily, Corporal M'Kenzie had picked up a very fair amount of colloquial Arabic. Our guide, Abdullah, set out with us for Aiha, which we reached in thirty-five minutes The temple is already described It appears to have been built on the extreme northern end of the village, the old wall of which continues to the east some distance beyond the temple Some tanks were spoken of as being old vaults, these would have been just in front of the eastern entrance The people talked vaguely about there being large stones and ruins higher up in the village, but nothing of any consequence was seen There is a good-sized pond, and on its bank a stone which may have been used for crushing olives The view from Aiha to Kefr Kûk, over the lake, is very fine One inscribed stone was found in west wall of temple, a squeeze was taken, the letters are Greek

'On September 10th we passed by the same road, on our way to the celebrated temple of Rukleh Leaving Rashaiya at 9 a m, we passed Aiha, and turned up a wâdy to north-east In the road we met a small detachment of soldiers coming from Damascus, to relieve others at Rashaiya They had stopped the night at Katana

'Our guide told us about a wild beast which had come to these parts and carried off children, evidently we had got into the neighbourhood of the lion, he said it had appeared at Burkush, not far from Rukleh At 10 45 a m top of Thogret, we descended a little, and turning off to the left among the rocks, passed two or three ruins of cut stone, and at noon arrived at Rukleh.

'This village stands in a little plain embosomed in hill, masses of ruins lie about in all directions and mark the sites of large buildings, the two principal remains are those of temples The first we reached is where the village now stands, the ruins are but a shapeless mass, and we wandered vainly about for some time looking for the great face (of Baal?), we found two Greek inscriptions on columns, of which squeezes were made. Eventually we became aware that the better-preserved temple (that described by Burckhardt and Robinson) was some few hundred yards to the north-east and at a little lower level I am very doubtful whether any part of the wall except at the north-west angle is still *in situ* it seems only to be built on the old foundations, and old materials are used in a very perplexing fashion The face (described by Robinson) is most curious, and appears to be looking at you wheresoever you go, but it is not at all likely that it is in its original position The upper part has been blown away with gunpowder, probably in hopes of finding treasure inside The face probably was placed in the pediment of the original temple at western end, in a similar manner to which the horned lady appears on the west end of temple at 'Ain Hershah

'Besides the three Greek inscriptions found at the temples, there is a fourth somewhat up the hill to the west, built into the wall of house, only a portion of this is now visible

'We remained here till 4 p m, and on our way back met the soldiers relieved from Rashaiya. Several of them were looking very ill from fever, and hardly able to stagger along

'*September 11th*—Left Rashaiya at 6 30 p m, went south-west, and passing an 'Ain at 7 40, got into Wâdy et Teim, at 8 45 passed an artificial tell, called Tel Thatha, and 9 18 arrived at village of Thelthatha a temple of which drawings are given Returned to Rashaiya in evening

'*September 12th* (*Sunday*)—Examined the hills about Rashaiya

'On this side Hermon appears to tower, at its highest point, about 4,000 feet above the neighbouring and parallel hills, these latter are connected with the former by narrow spurs On one of these Rashaiya is built, and from the eastern end of the town wâdies run down towards Rukleh to the north, and to Beit Lahia to the south The castle was said to have large ruins in it, but on examination, I could find only modern walls

'As there is no spring of water in the town, it may be questioned whether it is the ancient site of a city The drinking water was brought up every day on donkeys from an 'Ain to south west, about an hour distant Many of the houses are built of masonry, but the usual style is to build up square pillars of masonry for the angles, and fill in the wall of mud or tapia This is made by beating and rolling hard a compound of mud and straw till it is two inches thick, and then cutting it into squares of two feet each, and drying them till they are like great bricks. They are then laid on edge between the masonry angles of the house, another course on edge is then laid on this, and so on until the required height is obtained, in most cases it is strengthened inside by transverse pieces on edge, and then a second wall of two inches In the house I was in, the wall had on inside four upright bins for corn made out of the hollow spaces They were about two feet square in the clear and six feet high, with a large hole at top to put in the corn, and a small hole at bottom for it to run out at when unplugged The other portions of the hollow spaces were turned into shelves and cupboards The whole arrangement would be capital were it not for the shelter it gives to bugs In my room they attacked me in hordes, and the mosquito net would only keep out the big ones

'A great proportion of the houses are built with two large square rooms side by side, and two small rooms attached to one of the long sides at each end, and the spaces between the small rooms covered over to act as a verandah, into which all the doors open Here all the members of the butcher's family slept in the comparatively open air It consisted of himself, wife, a mother and mother-in-law, some other old ladies, a lot of children, and a fat sheep Two of the party had the fever every few hours, and there was seldom silence during the night for more than three hours, and even then there were frequent squabbles, either the sheep walked over the baby, or the little child with the fever was whipped for making a noise and groaning, or else the butcher was abusing his mother-in law We established a cordon in the veranda, past which they should not go, but in the night they generally managed to roll over to our share of the building and helped the other enemies in keeping us awake The fat sheep was being got ready for a feast, then distant only three weeks I don't know whether they are all fattened in the same manner, or whether this unfortunate animal had to make up for any lost time, but it seemed to be one old lady's sole duty to stuff it with vine leaves there she was at it all day and even during part of the night These leaves about the Lebanon are very much used for feeding the cattle After the grapes are gathered, the women go into the vineyards and quickly strip the vines, running the hand along each branch The later growth of the mulberry leaves is also used in the same manner, and it is a curious sight to see the shepherd, mounted up in a tree, throwing down leaves to his flock, who are gathered around with upturned faces The fig leaves appear to be pulled off and allowed to dry on the ground, but whether they are used as winter fodder, or for bedding, I could not ascertain The people are more fond of asking questions than answering them

'Our storeman from Jerusalem, who had also been suffering from fever, arrived on Saturday afternoon, just in time to act as interpreter at a visit the Modir paid me on Saturday

afternoon The Modîr said that Hermon must be visited at once, or we should have a difficulty in getting up, as clouds were beginning to collect I accordingly made arrangements to go up on Tuesday

'The difference of the atmosphere in the Bukâ'a and on the western side the Lebanon is very striking During the whole of our fortnight at Rashaiya we had dry cloudless days with the wind in all quarters, but during several of these days we could see that on the Lebanon clouds had come up from the sea and had settled as far as the western height, but they went no farther, later on in the season, when there had been heavy showers about Beyrout, the sky had still remained bright in the Antilebanon This difference in climate is to me very perceptible, I always found the air in the Bukâ'a so much more brisk and invigorating, except when the hot winds are blowing One of the Druse sheiks gave me a piece of advice, the utility of which is, I believe, recognised by the natives He said, "Don't go to sleep before midnight, if you do, you are sure to catch fever You get heated and feverish in the daytime, you feed before you go to bed, you get restless in your sleep and throw off your clothes By and by the warm wind ceases, and a cold, chilly breeze springs up, which finds you naked and in a perspiration You wake up cold and shivering, and pull the clothes over you, but it is too late then—in the morning you have fever"

'Monday, September 13th Left Rashaiya at 6 45 a m, at 7 50 passed through Beit Jahia, and arrived at 'Ain Hershah at 8 30, and at the temple 8 50 Described page 506

'We were told to look out here, as there were amateur bandits about

'This temple is the most perfect of any that we have found about Hermon No inscription was seen anywhere except some rude Greek letters cut on the face of a rock, which appear to be of a late period, and may have been cut by visitors after the temple had ceased to be used To the east is a niſt in the rocks, closed by a masonry wall, so as to form a small chamber, and there are also the remains of a building which appears to be recent and made up of old material Below to west is a sarcophagus, with what appear to be sculptured figures tugging at a rope

'We left at 1 45, and returned to Rashaiya along the base of Mount Hermon At 2 40 p m we came on a ruin called the ruin of the sun, and close by was "a hill of the sun" It appears to have been a temple, but nothing now remains but a portion of the south-west angle The direction of side is 89° For moulding see Tracing VII There are ruins about, but they appear to have belonged to a village These are placed where two wâdies, separating the parallel hills from Hermon, come together, and break out to the west There was here also what I took to be a modern village, but found it to be a collection of goat-pens. The guide said that during the winter the goats cannot be kept at Rashaiya, on account of the cold, but are brought to this secluded spot, where the snow does not lie

'In making our preparations for going up Mount Hermon, the Modîr said we must have some soldiers if we wanted to go down the other side towards Kulat Jundel I took one man, therefore, as I wished to go and see a ruin near Rimeh, which the schoolmaster said Mr Wright had lately discovered

'We started at 8 30 a m on September 14th, with as little baggage as we could manage with, but this required two mules On our way up we learnt something more about the wild beast of Burkush It was described as being a very large wolf, and that two charcoal burners had met it on the mountains, and had thrown stones at it, but it had passed on

'Our road lay pretty level until we passed a pond, at 9 25, when we began to ascend a wide wâdy, covered with vineyards and orchards At 10 20, at a height of 4,790 feet, these

terminated, and we went up the side of the hill by a very rocky path At 12 10 p m we passed a cave, and at 1 p m arrived at summit The last thousand feet was up a steep slope of shingle, with rocks cropping out here and there There is here no regular path It was somewhat chilly on top, and the day was hazy The height of north peak, as obtained by aneroid barometer, was 8,700, but I have called it 9,000, as it is safer to stick to round numbers in a case where a very small error would make a great difference

'I could only distinguish a sheet of water to our south, and there was no sign of Damascus, which I was very anxious to see from here It was poetically described to me by a gentleman at Beyrout as looking like a pearl set in emeralds I had brought a theodolite up, but observing was hopeless, and, indeed, the nature of the ground is very much adverse to the taking of a round of angles

'We had hardly got up to the ruins on the south peak when there was a cry of "Dubbein" (bears), and on looking over the wall there were to be seen two large animals—looking in the distance like donkeys—quietly coming up the southern wâdy, browsing as they ascended While we were trying to restrain some of the men, two of them, before we were aware of it, bolted off down the hill to the west, and were out of sight in a minute They soon appeared on the same level as the bears, and coming down on them with the wind When they had got to about two hundred yards one of the bears turned towards them, and stood bolt upright, with his fore-paws dangling down They then both moved off slowly to the east They were now only about three hundred yards from us Then one of the men fired a shot, which of course only scared them, and they set off at a lumbering trot, the men commenced to run, too, and two more shots were fired Then one of the bears turned round, and seemed inclined to face his assailants, but, on second thoughts, the idea of a wife and family appears to have crossed his mind, for he turned round and followed his companion They then started off in a very clumsy gallop, and soon got among the rocks At first there had been a chance that they would have been turned up the hill to where we were, but they evidently preferred the rocks Had we remained quiet at the top, we should probably have been able to get close to them They appeared to be large animals, standing about seven feet high when on their hind legs, and about their necks was a quantity of tawny brown hair The natives say that they do much damage in the gardens every year, and that several are killed annually.

'We now set to work to examine the summit and take measurements On walking from the north to south peak, we got somewhat out of the line, and stumbled across a stone with a Greek inscription, of which a copy has been sent, it does not appear to have been observed before by any traveller We pitched our tents to the east of the southern peak, so as to be out of the wind It was the first real night's rest since leaving Muktarah, and I slept well, being only awakened once or twice by a tugging at the tent ropes, which made me think the bears were trying to effect a lodgment, it proved to be only the wind

'We had our tent struck some time before sunrise, and got things in order for a march It felt bitterly cold, but the thermometer never fell below 36° Fahr, so that we were still some way above freezing, the keen wind, however, took more warmth out of one than a sharp frost would have done I wanted to see if the sun's rays would light up Jebl Sunin before Hermon, but there was too much haze, or the Antilebanon was in the way, for we could not be certain when Sunin was lighted up The sun's disc rose in a curious shape It often appears elliptical, but I had never seen it angular before

'On the plain we now saw to east a number of seemingly artificial mounds, similar to those scattered about the Jordan plain and the Bukâ'a

'Our water was obtained from snow, of which there were two or three patches on the east side, in crevices On the north-west side there was still a mass about 400 feet below the summit, 300 feet long and 50 feet wide, this probably remained until covered up by fresh snow.

'After examining the western peak, which proved to be about 100 feet lower than the other two, and on which we found nothing remarkable, we started at 8 a m Sending down our party by the usual path to Kulat Jundel, Corporal M'Kenzie and I took our course on foot down the steep narrow gulley, where the bears had disappeared, and down which any remains of the temple walls would have rolled This gulley is steep, so much so that one could only go down very slowly, and angular stones rolled down readily Our line lay generally over rough rocky steps, but here and there we came upon hanging beds of shingle, which moved off directly we got on to them, and made terrible work with our boots It was sometimes uncertain whether these beds of shingle would not take us over small precipices, but by taking runs sideways along the gulley, we managed to clear them We found no signs of any cut stone on our way, but towards the bottom there are stones which may once have belonged to the temple above, but are now much broken up No signs of any columns It took us an hour to get to the bottom, and in that time we had descended 2,500 feet The gulley runs down in nearly a straight line all this distance For the last few feet we had to get along very cautiously, for we had lost the soles to our boots, and now we anxiously awaited the arrival of our mules, the idea of completing our journey barefoot being anything but pleasant. At the bottom of the gulley we had arrived on a small plateau, about 300 yards broad, sloping to south, and then, again, the gulley continued down towards the Awaj In front of us was Arny, a pretty little village, on the southern bank of the Awaj, and lying in a branch wâdy, all green with willows and walnut-trees There appears to be plenty of water there On sending our mules round by the path, and taking a short cut down the gulley ourselves, I had calculated on cutting them off before they could get away from us, but we had been so long in getting down that I began to fear that they had passed the place where we were, and were waiting for us at a point to our east It was not until we had been waiting nearly an hour and a half (at 10.25 a m) that our party came up, and reported having come down a very bad road all the way On making inquiries now of the guide for the ruins above Rimeh, it turned out that he knew no more than I did about them So we rode on till we met some shepherds, who declared there was no ruin anywhere about These men were a bad-looking lot, and seemed to grudge us even a good word At last they said that they had come from a distance, and knew nothing about the place. When we did see a man who knew the country, we found the ruins to be above Arny (on the north bank), and far away from Rimeh. We now went sliding down the hill, passing an 'Ain at 10 45 (5,850 feet), and arrived at the ruins at 11 45 a m, at 5,560 feet

'TEMPLES ABOVE ARNY

'The hill-side here lies nearly east and west, the slope being from north to south The space for the temples is cut out of the rock, and the stone is used in the walls, it is a limestone conglomerate, and has only been rough-pricked on the face.

'There are the remains of two temples—that to the west is a complete mass of ruins, and was not measured A Greek inscription was found, in a border, on a stone at the western

end, but only two or three letters could be made out. Beyond to the west is a narrow gulley which appears to be a continuation of that which we descended from the summit of Hermon. Here is a rattling torrent rushing noisily past, it appears to come from about the level 6,000 feet, where there seems to be a line of springs running down towards Arny, and helping to form the waters of the Awaj. The volume of water that is here allowed to run to waste is enormous, and, no doubt, this was once a well populated and cultivated valley, while now it appears to be partially under the sway of the Bedouin. The temple to east lies east and west, the angle of the side being 76°, entrance is to east. The rock is scarped to a height of about 15 feet to 20 feet, to obtain room for the building in the side of the hill. The length is 107 feet 6 inches, the breadth 41 feet. The walls are 3 feet 6 inches to 3 feet 10 inches thick, and are 20 feet high to south; they have no batter, and are in ten courses, averaging from 1 foot 6 inches to 2 feet 6 inches in height each. The same courses do not, however, run right round, and in some places there are stones 3 feet 3 inches to 3 feet 10 inches in height. On top of the wall is a cornice, the moulding being a cyma between two fillets. Perhaps there was a blocking course above this, but no signs of it now.

'The entrance is in the centre of east wall, 13 feet wide and 15 feet high, a lintel in one piece stretched across, but it is now broken. There are simple architrave mouldings round this doorway. There are three rows of columns running up the length of the building, at about 9 feet from centre to centre, and there appear to have been two more rows at east side of the building. It does not seem clear whether these columns were in the original building, or whether they are an addition at some later period. The position of the centre row running up the middle of the building, and so obscuring the view of the altar from the entrance, is quite unusual. These columns are of the Roman Doric, and are 10 feet or more in height. The bases are buried, lower diameter, 1 foot 11 inches, the upper, 1 foot 8 inches. At the west end is a niche, for a statue, perhaps. This temple has nothing in common with any others seen in Cœle Syria, except that on the summit of Hermon. The court to east is 128 feet long, and same width as temple. Apparently, it had a low parapet wall round it.

'We left these ruins at 1.45 p.m., and, getting up into the path, passed Rimeh to our right, down in the valley, and came to an 'Ain, at 3.30 p.m., 5,170 feet. We now turned off along a wâdy to the left, and got down to Kulat Jundel at 4.15 p.m., at 4,890 feet. The guide said we had passed two villages to our right, after Rimeh—viz., Shrâha and Burbul. These are probably 'Ain esh Sharah and Durbul of Robinson's list.

'On our way we met a countryman, of whom I asked some questions about ruins to south. He said there was only Nimrûd (described by De Saulcy). On asking who Nimrod was, he said he had been a great man who used to shoot up in the air with blood-tipped arrows, and when they came down again he would show the blood on the ends, and say that he had wounded the gods. This provoked the gods, and they sent a mosquito, which ate up his nose and got into his brain, and he died in great pain.

'Part of this legend is very similar to that given to Layard at Nineveh (p. 25). It was odd in this country to hear a man talking about "the gods."

'The Castle of Jundel is a small ruin, about 25 feet by 30 feet, standing on the northern side of a small wâdy, falling into the Awaj. It hangs on a rocky spur, facing south. Inside it measures 19 feet by 24 feet, and at the west end is a fireplace cut in the rock, with several mouldings round it. The sketch of this has been mislaid. The lower portion of the wall is cut out of the rock. The roof appears to have been vaulted. As on the west side, there is

a skew-back, the entrance was towards the east. On the south side there is a little terrace cut in the rock 11 feet wide, and from this the scarp goes down very abruptly to the wâdy, 100 feet below

'The walls are about 3 feet thick, some of the courses measure 3 feet and more in height. There is no sign of any bevel on the stones

'A moulded stone, apparently a cornice, was found close by

'We camped under a tree, near the village The people came up, and were inclined to be communicative, but we got little information from them The dust on the ground was very disagreeable, as we had brought no bedsteads We experienced a difficulty here, which in a less degree is felt all over the Bukâ'a. we could not get change for the smallest piece of silver

'*September 16th*—Started at 6 10 a m, and very shortly got out of the wâdy into the great plain to east of Hermon At 7 20 we passed an upright stone, which appears to have once acted as a boundary mark of some kind We here passed some pits dug in the ground and revetted round with masonry, with a little ditch outside These the guide said were for the hunters to conceal themselves when out after wild boar We passed somewhat similar constructions in some of the valleys, only without ditches, and these were said to be for concealment in shooting partridges, a decoy bird or two being used to bring them up to the proper spot where they were to be slaughtered

'At 7 50 we arrived just below Burkush, at level 4,050 feet, and 8 45 had arrived at this important ruin, height, 5,200 feet

'We were now on the scene of the lion mystery, and on our way up had passed some caves in the rock side, where the sheep are gathered in winter, and in which he might very well be lying in wait Before we arrived at the ruins of the temple, we passed through a ruined village or town of cut stone, with some sarcophagi and slabs scattered about On one I thought there was an inscription very much defaced, but had not time to come back and satisfy myself about it We occupied ourselves for six hours in taking measurements of the ruins, and crawled into all the subterranean places that were left open Some of them evidently are closed up, and are probably full of corn and tibbin

'We made indirect inquiries about the beast, and got very ready answers Four children in all had been carried off, or had disappeared at intervals of about twenty days, one of them a girl of nearly marriageable age, the others were children Nobody had seen them taken off All they knew was that they had disappeared One woman said that two of the children belonged to her, and that it was nearly twenty days since the last had been taken, and that she was in a great fright for her others, and was too poor to follow the example of other people and leave the village. I heard afterwards that some soldiers had been sent down from Damascus to inquire into the matter, and had not discovered anything I made several inquiries among the shepherds and Fellahs, and they all concurred in saying that they had not lost any of their flock—neither sheep nor calves, but they all voluntarily gave information about the loss of the children. The only conclusion I could come to, supposing the children really to have disappeared, was that they had been kidnapped by strolling gipsies, of whom there are great numbers It is curious that at the same time at Jerusalem there were stories of children having disappeared from near Beitin It was satisfactory to have traced up the story to its source, but I do not see there is any certainty of all the four children having been lost Perhaps one was lost, tumbled into a cistern, or something of that sort

'We left Burkush at 2 40 p m At 2 50 passed the 'Ain to its west, and then made for Rukleh Visited a rock-cut tomb here, and then passed on to Deir al Ashayir, where we arrived at 6 20 p.m On our way out of Rukhleh we passed a little ruin of a temple (?); and our guide said that south of the road to Rashaiya there are two ruins, one of a temple and another of a convent, but that very little was to be seen but broken stones

'*September 17th*—After taking measurements of the temple, and a squeeze of an inscription on a stone to east, we left at 8 28 a.m The people here were mostly ill of fever, and we could not get any guide, so we had to find our way as best we could to Kenetseh Just before leaving Deir el Ashayir, a man told us of a large cave, capable of holding 1,000 goats, in the side of the mountain It was too late to visit it We were also shown several ruins to west, but they were of no importance We now turned down a wâdy to north; and, after several mistakes, we arrived at Kenetseh, 11 35 a m Here are the ruins of very small temples, and the ruins of a considerable village We left at 12 35, and arrived at Kefr Kûk at 1.30 p.m.

'Here were a few stones scattered about, and an isolated column standing up in a pond, it appeared to be Doric On coming over the dry bed of the lake, which had been ploughed up in the season, the people said that after the rains the water boils up from a hole in the centre, and rapidly fills the bed

'It is to be noticed that the people about Hermon and the Lebanon generally attribute the ruins about to the Franks; while in Palestine they seem to think that they were built by their ancestors Thus, at Jericho, after uncovering the remains of a Christian chapel, I found the black Bedouin lifting up their hands and calling witness to what *their* forefathers had been able to accomplish This appears to me to point to the northern people being the descendants of the old inhabitants who had seen the Greeks and Romans come and go, while the Bedouin and many of the Mahometan Fellahin are intruders from the east, and know nothing of the origin of the ruins The Fellahin of Palestine have often told me that they are not the descendants of the old inhabitants, and that they expect the Christian some day to come and turn them out again

'*18th*—Plan drawing

'*19th*—Sunday, and getting ready for a start, our fortnight being up

'*20th*—We had some difficulty in getting away this morning, everybody wanted backshish I found it necessary to send a message up to the serai, and very soon six or seven cavasses came down to clear the way. We left at 8 40 a m, and first went down to Akraba in Wâdy et Teim, where there is a small temple We now went up by 'Ain Hershah, and past 'Ain 'Ata; and at 1 20 p m reached an 'Ain At 1 55 we reached Kuloway Here we were shown some pieces of stone which had formed part of a building, but it was not remarkable in any way We heard, however, of some ruins above at Neby Shaib (?) We started at 2 15 p m, and arrived at 3 p.m Our guide was afraid to go up with us, so we took some boys from the village This ruin is at a height of 3,350 feet, and appears to have been the site of a village Above, somewhat, is a large oak tree, overshadowing a beautiful stone sarcophagus, 8 feet 7 inches long and 3 feet 9 inches broad on outside. The sculptured figures are very faint, but some attempt at a copy has been made, under the impression that the posture of the figures may have some mystic meaning Besides those shown, there is a child lying on its left arm, left leg stretched out, right hanging over it, and right arm on right leg We returned to Kuloway at 3 30 p m, and got to Mimes at 4 20, and to bottom of

wâdy at 4 40. Arrived at Hasbaiya at 5 30 p m Camp on plateau in wâdy to east Height, 2,270 feet

'In the several villages there appear to prevail totally different customs For example, at Rashaiya, like in many parts of Palestine, the women carry the water-bottles on their heads, while at 'Aitat and Kuloway they carry them on the shoulder

'*September 21st, Tuesday*, 8 55 *a m*—Left on foot for Hibbârîyeh Arrived at 10 5, and left again 1 30 p m Temple is planned We here got into the midst of a Moslem funeral, and after it was finished we were troubled in our measurements by being surrounded by the rabble of the village Our guide took us now over the hills to north to some wonderful sounding stone, where we arrived at 3 8 It proved to be only a loose piece of stone, which emitted a bell-like note when struck At 3 45 we came to a stone which formed part of a rocky knoll, and which had partially been sawn away, apparently for an olive mill After this we went up to the tombs of the Franks, which consist of a double sarcophagus cut out of the top of a flat piece of rock 3 40 We now returned by 'Ain Runia 4 30 To Hasbaiya, this excursion appeared to have exhausted the ruins in this part of the mountain

'I should have mentioned that at Neby Shaib there is a cave under the sarcophagus, in which a lamp was burning, and they said a sheikh had been lately buried there We found also at Deir al Ashayir that a sheikh had been lately buried in the temple And altogether more reverence seemed to be shown to these sites than one would expect from sincere Mahometans

'*September 22nd*—We had made our preparations the night before, and, leaving our heavy things in charge of the schoolmaster at Hasbaiya, set out for Banias Corporal Cock and the tents went by the lower road, while Corporal McKenzie and I went over the hills, so as to visit Bustra

'The muleteers we had got were a dreadful set of old men, who appeared to think we were quite capable of murdering them and carrying off their mules When we had selected the least old of the three to go with us over the hills, he begged and implored one of the others to go with him and protect him We left at 8 10 a m, and got to Hibbârîyeh at 9 40 Here our muleteer said he did not know the way, and we were obliged to get a Mahometan, a fine old fellow, to act as guide (the muleteers were Druses) At 10 45 we arrived at a plateau, being the top of a spur of the Lebanon At 11 10 we passed a square tower, which appears to have once been a guard-house to command the road, called Melelîneh Left at 11 20 Cut across to a ruin called K Shûba, which was a mass of cut stones on an isolated knoll Arrived at 11 52 Passed by an 'Ain at 12 55, and, after losing our way for some minutes, we came upon Bustra at 1 40 p m A ruin of a village, similar to a great many others about the mountain, but, as a ruin only, not worth seeing Bottom of hill at 4 20, and Banias 4 50.

'I tried to get a guide now for the Castle of Subeibeh, but the people seemed to be suspicious of us, as we were without dragoman or cook, and none would go with us

'We left at 5 50 a m, and found our way up by ourselves, not meeting with a soul going up or coming down I wished to see the bevelled stones on the castle, now that the green stuff about the base is all dried up

'I agree with Captain Wilson in thinking that the castle may not be "earlier than the eighth or ninth century A D" But at the south west angle I came across what appear to be the remains of an older structure, probably a temple. Some of the stones are very large, being 3 feet high and 6 feet long, while those of the castle generally average about 1 foot

9 inches in height and 3 feet in length Probably these stones would be covered by creepers, etc, in the spring

'Got down to Banias at 9 a m

'At the south gate, on a column, saw masons' marks, a copy of which has been made

'I could hear of no more ruins about Hermon, and considered it would be losing time to continue any longer about

'On looking up the Bukâ'a from Hermon and other heights, I nearly always noticed the villages to be placed in close proximity to out cropping patches of a white, chalky formation Whether water gushes out near these patches, or whether the vines grow better on them, I am not aware

'Being desirous of seeing the temple of Kades and the synagogues of Kefr Bir'im, we left Banias, after our return from Subeibeh, on 23rd September, at 9 50 a m Went by way of Hunin, and on our way through the forest beyond, Corporal McKenzie was caught by a branch and thrown on his head on a rock and a good deal damaged We arrived at Kades at 4 40 p m The temple here has little in common with those of Cœle-Syria It is on a stylobate, which has base mouldings, but no cornice The courses vary in height The entrance is to the east The keystone of the flat arch over the southern niche has shoulders on it, so as to prevent it slipping This is a very general practice in existing Moslem work in the country, but it is the only instance in which I have noticed it to occur in Roman work In a country subject to earthquakes, its value is obvious, and I had often wondered how the Moslems had obtained the idea Had the same system been adopted at Baalbec, in the small temple, it appears likely that the great keystone over the entrance would still be in its place

'*September 23rd*—We rode to Kefr Bir'im We left at 10 50 a m for Yarûn Shortly before reaching it we passed a large sarcophagus, 8 feet 3 inches by 4 feet 10 inches and 4 feet 4 inches high, and 2 feet 4 inches by 6 feet inside, it had lately been blown out of its place by a Fellâh There were here the foundations of a temple 60 feet long and 30 feet broad, lying east and west, entrance apparently to east Some of the capitals at Yarûn were very curious, in the pond close to the church is a slab of stone sculptured Left at noon and arrived at Bint Jebeil at 1 10 p m, and at Tibnin at 3 40 p m

'I had a sharp attack of hot fever during the day, which partially yielded to a lump of charcoal, which I procured and swallowed at Yarûn I was unable to go up and see the castle at Tibnin, but was told that there were no traces of old masonry about it

'*September 24th*—Left at 7 30 a m, arrived at Rubrika at 9 45 a m This village appears to have possessed a Jewish synagogue, but it is fast being removed Some columns still remain they are monoliths, about 2 feet in diameter and 10 feet high, in one, the capital is curious, in one piece with the shaft (see sketch), on a carved stone there was a bas-relief of what appears to be a pot of manna Outside the village is a stone with what appears to be a Syriac inscription Left here at 10 5 a m, made for Kulat ash Shukif, and had some difficulty in finding the bridge, as the country is here very wild At noon arrived at an 'Ain in Wâdy, and at 1 p m at the bridge, Kakayeh, over the Litâny, and at 3 35 p m we arrived at the ruins of Belfort (described p. 504)

'Two of our muleteers now refused to go on with us, and as I did not wish to go back into Wâdy el 'Teim, I sent Corporal McKenzie with these men to Hasbaiya to get other animals and to bring on our stores, he was to meet us either at Jisr Burghus on Sunday night, or at Tubb Jenin on Monday night After taking measurements in the castle on a rainy

morning (27th September), we started at 11 a m and got to the Jisr Kardeli at 1 15 p m, and at Jisr Burghus at sunset, on our way we passed a Maronite village, where for the first time we were asked to pay for the grapes offered us, which were growing in the field

'Early in the morning of 28th September, our muleteer came running in to say that Corporal McKenzie had passed the village a few minutes before and gone over the bridge I could hardly believe it, but passed an hour in vainly shouting after them, and as the road lay up a steep hill, and every now and then in view, they ought to have heard and seen me if they had been there We left at 8 a m and passed up along the east bank of the Litâny, the positions of the towns about here appear to be incorrect in Van de Velde's map As we passed along I began to look out the reason why the Litany should have cut its way so deep into the hills here, and it appeared to me that there had been here a series of lakes into which the Bukâ'a, then a swamp had drained, and that the overflow from the lakes, in a greater volume than that of the river Litâny at present, had gradually cut its way back from the sea, and so opened a passage by which the waters of the lakes had escaped.

'We went down to the natural bridge of el Kuweh and arrived at Jubb Jenin at 3 p m, hearing of no ruins on the road, except Kaukaba, which was out of our way We had now spent every farthing with us, and were obliged to get our muleteers to lend us some bread Later in the evening, Corporal McKenzie arrived with the baggage and fresh mules he had had great difficulty at Hasbaiya in getting away He had never been near Jisr Burghus, and the muleteer had invented the story about them having passed over the bridge I sent off Corporal Cook early in the morning with the heavy things to Aitat On his way he was thrown from the back of his mule, and suffered from the injuries he received for some days.

'We started at 8 a m, and arrived at Zekweh (described page 500) at 10 5 a m, and at the temple of Mejdel Anjar at 12 15 As we went up the hill to it, it appeared to be quite a small ruined building, and it was only on standing close to it that I realized its noble proportions It is the finest piece of masonry I have seen in the country: the courses are about 4 feet high each, and are beautifully bevelled

'The stylobate, as at Kades, has no cornice There are bases of columns about, similar to those of the larger temple at Baalbec The entrance faces north-east, angle of side 28° 80′ We now passed on to Deir el Ghazel, where I heard there was another temple, but we only found part of an architrave A schoolmaster there said the stones had lately been used for building purposes At 5 15 p m, we arrived at Haish al Ghanim, a little village of mud hovels, and our tents arrived some time after dark

'*Wednesday, September 29th*—A very cold morning We were up at 4 a m, and could get no milk or eggs, as the villagers were still in bed, but we got a dish of wheat from a man who had been up all night boiling it in a great cauldron We had now come to an end of our charcoal, and it took a long time to get water hot with the fire made from the cow dung we had collected in the field Started at 6 30 a m, passed through meadow-land intersected by narrow and deep dykes, with rotten banks We then passed over an undulating tract until we passed Serin at 7 30, when the country again became a level plain Took our line by the telegraph wires, and at 9 5 got our first view of Baalbec At 10 a m we arrived at the ruined wely about 2 miles south-west of Baalbec A plan of this was made, and also a restored elevation The curve of the dome was obtained from some of the stones lying about, this wely is described by Burckhardt (page 12) The mihrab is formed of a stone sarcophagus set upon end, and is directed nearly to south. On the north side, on the archi-

trave, is a Cufic inscription, of which I have seen no previous mention The tomb is placed so that the face would be to the south

'The stones are cramped together

'We left at 11 15, and arrived at Baalbec at noon

'My object in visiting Baalbec was for the purpose of comparing the more ancient part of its walls with those of the Haram Area of Jerusalem

'Not having Wood and Dawkins's plates with me, I am not aware of the conclusion they came to with regard to the three-stone temple And the restoration given by Robinson and by Murray (reduced from the restored plan of Wood and Dawkins) is of a time after the latest pagan additions, the older work being made to run into the later pagan in a manner very perplexing to those who have not seen the temple, and have not Woods and Dawkins's plans As the plan is on such a small scale, it would not, perhaps, be right to call it incorrect, but it certainly did not convey to my mind that the wall round the large temple is totally distinct and separated from the later work I have, therefore, given a plan of this larger temple and restoration, of the plan and elevation of west end

'It appears to me that this temple stood alone, and I could see no indication of the court to the east having originally formed part of it It measures 294 feet by 154 feet It stands east and west, the entrance to the east, and bearing of side about 79° 30' It appears to have been hypœthral The outer sides of the plinths of the columns are flush with the faces of the wall The wall it stands on is about 46 feet 6 inches in height It has thirteen courses, each 3 feet 8 inches to 3 feet 9 inches; and in this respect they resemble those of the Haram Area at Jerusalem The system of bevelling is also very similar to that at the Jews' Wailing Place, but, the stone at Baalbec being softer, the work has been done more quickly, and the chisel marks have a disagreeable appearance, radiating from several centres, as though the workman had stood at one point and rapidly struck off all the stone that lay within his reach The system of laying the stones is, however, different to anything to be seen at Jerusalem There is first a course of stretchers of about 18 feet in length, above is a course of headers about 3 feet each, then stretchers again, and so on alternately, giving a neat and uniform appearance to the whole structure The wall can be seen for its entire height on the north side, and partially on the south side, but to the west it is covered up by later work On the north wall, at east end, are several incised characters, some of them Arabic inscriptions, some Hebrew (?), and there is a Byzantine cross, and there are also characters which appear to be Phœnician, at least they are very similar to those on the Sea Castle at Saida On the north side of the temple is a void space of 25 feet 3 inches, and then the wall of big stones This wall is also to be seen on the west side, where its outside is nearly the same distance from the wall of the temple as on the north, and it appears probable that the great wall also continues round on the south side (see "Robinson," p 512), and that the ditch to west and east has nearly been filled up, but I do not think with Dr. Robinson that it was intended that the wall of the temple should in the original design have been covered up by filling in the ditch My impression is that the ditch was to have been left open, and the great outer wall placed in front to protect the inner wall against the assault of the battering ram, which would have very soon brought down the colonnade, could it have played freely against this wall of comparatively small bevelled stones The covering wall consists of two courses of 4 feet 4 inches and 4 feet 8 inches in height, and then the great course of 13 feet to 14 feet in height, and above this, at the west end, the three stones of about 13 feet in height. It will be seen by the restored elevation that the size of the columns

is out of all proportion to the heights of courses in the inner wall, so that without the outer wall it would lose its grandeur of appearance at a distance. I have to suggest that the bases of the columns and the shafts may belong to the original temple, and that the capitals and entablature may be of the time of the later addition, or may have been reworked at this time A section through one of these bases is given (Fig 7)

'*September 30th*—Left Baalbec at 7 15 a m Arrived at isolated column at 8 50, for elevation of the lower portion of this Corinthian column Rode over to village of Mokhana 9 50, and got to Yunin at 10 45 a m Here we could hear of no ruins, though the foundations of one are spoken of in "Murray's Guide," page 541 We, however, saw something very like a ruined temple on top of a hill, and insisted on going up there, in spite of the assertions of the inhabitants that the nearest ruins were at Nakleh On getting up to the top of a hill close by we found in front of us (11 a m) merely a ridge of rocks We now took the road to Nakleh, and arrived there 11 45 a m It is situated in a gorge to south, about 200 feet above a stream, where are groves of mulberry and other trees In the conglomerate rock of the hill-side are several grottoes The temple is already described Left 12 15 p m, and arrived at Baalbec 1 20

'Left Baalbec at 4 15 p m, and encamped the night at the little village of Talhiyeh, where we arrived at 7 p.m.

'On 1st October, left at 6 a m. for Kusr Neba, where we arrived at 8.7 Description given already of temple The people here were extremely hospitable, and brought us out fruit They said that there were old quarries a little farther up the hill, and a large ornamented stone near We now started, 8 50, for Husn Niha, but missed our road, and got up into a very hilly country We separated to look for the road, but were misled by the country-folk, who also bothered us by answering our shouts At 12 15 p m, I had found my way to Husn Niha, and was joined soon after by Sergeant Bittles (who had arrived the day before at Baalbec) He had got into some awkward place in the hills with his horse, and they had rolled down a hill together He was a great deal bruised Husn Niha is already described Left here at 2 10, passing Niha, when a plan was made Got into the plain at 3 34 Passed Zahleh Near here I passed some acquaintances from Beyrout, who, seeing us approaching without saddles or bridles, and mounted on mules, took us for muleteers sporting Frank hats, and were astonished to be greeted in English Arrived at Stora at 5 40 p m Went up the carriage road, and arrived in camp at 7 30 p m Started at 2 50 a m, and arrived at Aitat on morning of 2nd October at 6 35

'TOUR TO AFKA

'Having examined most of the temples of Cœle Syria, I proposed going to Afka, and thence by the cedars to Demetris, and so to take in the few temples on the west side of Lebanon

'People were just now leaving the mountains for Beyrout, and all the best mules were engaged We could get no arrangement made in the hills, and so sent down to Beyrout, where a man undertook to supply us with animals It appeared afterwards that he had found the same difficulty about getting mules, and had put up with very bad ones

'On 8th October, the day fixed for our departure, it rained heavily at intervals all the morning, and, apparently, the summer had broken up, for there were dense clouds to be

seen in all directions We had no time to put off our journey, and started the mules at 2 p m, following soon after

'This time we took a cook, Antone, who speaks a little English Corporal Cock had not recovered his fall, and remained behind Corporal McKenzie accompanied me. Before we reached the Beyrout river we had overtaken our baggage, one of the animals a weak horse, the other a lame mule, both going very slowly. We rode on to the Dog River, and waited there for the baggage, hoping to get to Ajettûn that night, but it was not to be our fate, and we encamped at the mouth of the river; for the baggage did not arrive till a long time after sunset In the morning we tried to get other mules, but were unable, and started off to Antûra, the road being extremely steep I considered it necessary to keep behind the mules all that day, as the muleteers appeared to be untrustworthy

'We went up along the northern bank of the Dog River and passed Deir Tanneis on our right. The name given to me was Tammeis, and I thought it might have to do with the Tammuz of the book of Ezekiel, but Robinson gives it Tanneis. It is, however, to be remarked that there is a Deir Tamis given in Van de Velde's map in the Bukâ'a south of Kubb Elias On coming over the Nahr es Salib, we saw a bright yellow stream running several hundred feet below us, so yellow that for a long time I thought it must be sand On getting down we found it to be a foaming torrent which we crossed by a bridge On returning this way two days after, we found no water in this ravine (the rain having stopped), but at the mouth of the Dog River, the sea presented a sheet of yellow, and it could readily be seen that if the ground about the Nahr Ibrahim (Adonis) is of a red sandstone, the sea at its mouth, after a heavy rain, might be of a ruddy hue and so give colour to the liquid, certainly the imagination could scarcely be got to consider the yellow hue of the sea at the mouth of the Dog River like blood

'As we got past Ajettûn, rain began to fall and continued all day, we got into Mezra'a Kefr Debien at about sunset, and here encamped Height 390 feet Here I tasted the only flavoured grapes I have come across in the country they had a distinct muscatel flavour, and were said to have come from the sandstone formation

'We passed a very disagreeable night About 11 p m the wet side of my tent flopped down on me, and on getting up I found the muleteers were not to be seen, and we had to go out frequently into the rain and drive in the pegs of our respective tents, the ground being like a sop

'*October 10th, Sunday*—Heard that our muleteers had deserted us and were bargaining to take a load of salt down to Beyrout, we rushed after them and brought back the mules, leaving the muleteers to follow We now left Antone to keep guard and bring the baggage to Jareiya, while we went round by Fukrah and the Natural Bridge Left at 1 p m and arrived at Fukrah at 1 57 p m

'FUKRAH

'*References*—"Robinson's Later Researches," p 613, "Murray's Guide," p 555

'The ruins of Fukrah are peculiarly placed We had been travelling over blocks of sandstone from Mezra'a, when, in the distance, athwart a spur we were mounting, we saw a raised brisling back of blue limestone On the upper part of this is a square tower, a mausoleum, lower down the hill to south the limestone is cut away and the temple is built

of a yellowish-green looking stone, which appears to be partly oolitic freestone, partly a hard claystone, crystalline in parts, and here and there looking as if it had been submitted to a great heat It is possible that the reason why this green stone was used in preference to the blue limestone, is because it is *found* in blocks on the surface of the ground, which require little cutting to bring them square It is very odd to see the blue limestone cut away and the temple walls built green in its place, every here and there a blue stone appearing, isolated, in the wall, and in one place, in an engaged column, there is one blue stone and the rest are green This temple is 55 feet 6 inches wide on the outside and about double this in length, and it appears to have been hypœthral, as no signs of any entablature or pediment were found except in front, nor any columns inside The entrance is to the east, the line of the side being 88°

'There are eight courses standing in the walls about 2 feet 2 inches each in height, the walls are 3 feet 8 inches thick, and have two stones in the thickness bonded together, the inside is quite plain At the entrance are pedestals of columns, the dados have rough projecting faces and marginal drafts, the whole roughly cut, the capitals are Corinthian, and similar to those at Zekweh and Husn Niha

'Outside to the east there is a court with an entrance, and engaged columns on either side, some blue, others green, capitals Roman Doric, a cornice lying near, a simple cyma The stones of the court inside have faint marginal drafts

'Part of an entablature lies in court, frieze and architrave in one, the former pulvinated, the latter similar to that at Zekweh and roughly cut. As plans of this temple will probably soon be published in M Renan's work on Phœnicia, I took very few measurements

'The mausoleum above is fully described by Robinson The lower part is of blue stone, the upper part green, we found in the inner chamber that some work was going on, there was a shaft half sunk, and a jumper and spoon, lying at the bottom, apparently had been left for the Sunday Our guide said Adan Bey was doing the work and looking for treasures Outside were some potsherds which had been brought up from the shaft

'It is possible that some country people may have wished to put a charge of powder inside and blow up the building, so as to get the building stone, or more likely, that some Frank archæologists may have been making researches there

'We left at 2 20 p m and arrived at Natural Bridge at 3 45 p m (4,990 feet), and got down to Bareiya by sunset our mules had just arrived

'*October 11th*—We were here 4,000 feet above the level of the sea, and as the weather had broken up the night was very cold Luckily it was fine, so we got some sleep and woke on a morning almost frosty Leaving Antone to get the baggage to Akoura how he could, we went by ourselves down the valley somewhat, in search of the road to Afka Our Arabic for this part of the country was of very little use, for besides other difficulties they soften the K, and Akoura becomes A-oura, and Afka, Affa, but our mode of leaving out the K did not satisfy the people, and they showed us the way to Antura and any other place but what we wanted I thought it better to trust to the map, incorrect as it is, and just before getting to Meruba, struck up a wâdy to north-west We now got into a lovely country rocks of bright red sandstone covered with fir-trees, rhododendrons in full bloom, and ferns We were now at about 5,000 feet and found the vines growing vigorously. As we kept along, we saw a magnificent wâdy opening up before us, with great beetling cliffs all round it We passed by a small village called Suwaitch, and turning to our right found the village of Afka in front of us We passed through a great many fields of young corn which had just come

up The Fellahin here sow it some time before the rains come on it then has time to become strong before it is covered up with the winter's snow, and preserved in that way till the spring We arrived at Afka at 12 25 p m This remarkable place is described by Robinson (p 607), and "Murray's Handbook," p 555

'The limestone rocks here, of which a wonderful section is exposed, appear to lie in their original horizontal position I crawled into the cavern above the fountain and could see nothing remarkable The water, as at Banias, at this time of year springs out of the ground at some distance below the cavern.

'The ruined temple is a very shapeless mass, this is the only instance I have observed of mortar having been used The courses vary very much in height they average about 1 foot 6 inches each

'On at least three stones in the wall facing the fountain, the letter Π is incised, about 2 inches high In this wall are the mouths of two aqueducts, which appear to flow during the rainy season, at least, the lower one does I crawled up both in the lower one the water appears to issue from a subterranean passage in the mountain side, which it was dangerous to enter The upper one was too small for me to go up more than a few feet

'We left Afka about 3 p m and took our road over the bridge towards Akoura, as directed by an old woman. We were in a wâdy, and continued going up at north-east till 4 20, when we got into the commencement of a vast undulating plain at 5,610 feet After a short time the road, which was excellent, divided into two, and we took that to the right, and cantered on in hopes of seeing Akoura in front of us Our way lay over lines of hillocks, with mounds across here and there damming them up, so that in spring they should be ponds. I could not find out whether these dams were artificial or not We went on and soon found ourselves overlooking the great tract of the Bukâ'a, with the sunset lighting it up gloriously There was no time to admire the view we were evidently on the wrong road, and cut across into that which had turned to the left, but after following this some distance we could find no tracks of anything recent on it, and so gave it up, and thought to get back to Afka. The sun had now set, but by the light of the moon we thought to pick our way Soon, however, we found we were out of the old track, and in another ten minutes we awoke to the uncomfortable idea that we had lost our way, and had the chance of passing a night in an atmosphere which chilled one to the bone We now took a line to west, in hopes of cutting into our old road, but only got more confused, and at last I settled to take our course by the stars and make it nearly west, hoping by this to get down at least a little lower and out of the wind, which was very cutting, but the curious thing was, we were always getting higher, and ever in front of us was a hill higher than that over which we had just scrambled.

'The highest point registered was 7,000 feet, but no doubt we were higher than this So that we were wandering over a plain only 2,000 feet less in height than the summit of Hermon What I feared for most was lest we should get among crags, when we would either have to leave our horses or retrace our steps We had no overcoats with us, and had eaten nothing since morning except a little Arab bread at Afka Still, we scrambled on, leading or driving our horses, and as we went the hills appeared to get higher and the wadies deeper, so that our way seemed interminable Up some hills which were simply masses of rock we had to push the horses. At last we hit on a track, and, following it up joyfully, came upon an open space which smelt very strongly of goats. Hurrying on to where the tents of the Bedouin ought to be, we found nothing but charred places, where

their fires had been, they had gone away for the winter It is amusing to think how our hopes dropped at each disappointment. First we thought to be in very late to a cold dinner Then that we might get to some village, and get put up for the night. Then that we might strike a Bedouin encampment, and stay with them And now even that hope was dashed, and all we looked forward to was getting down a little out of the wind Straight on we went, and were nearly starved with cold Eventually we came on a small track, and followed it up till it appeared to go down, gently, continuously Until this time we had constantly been rising, so here was hope

'The moon now dropped out of sight, and we lighted our lantern, which by some lucky chance had got into the saddle-bag Down the track we went, losing it constantly, and picking it up by means of the lantern After getting on some distance, we heard the barking of dogs somewhere down below us in the distance, and afterwards saw the light of some village, which I supposed to be 'Almît Soon we heard the brawling of a stream, and then came upon ploughed land The cold now had become somewhat diminished We made an abortive attempt to get to the light; but we came upon the edge of what appeared to be a yawning abyss, so we tried back on our track again

'Some water began to gush out from the rocks, and we slaked our thirst, for we had not met with water since leaving Afka. Now we lost our path again, and found ourselves hanging over some awkward-looking places After some time we came on a rivulet, the bank of which we followed until we passed a goat-pen without a door Passing this, we found precipices all round, and our lantern had gone out We went back towards the goat pen, and could not find it, but, after some wandering, found we had gone up the banks of the wrong rivulet to look for it We now got into the goat-pen, and gave the horses a roll, but cold, wet, and weary ourselves, we found no place for rest

'It was difficult to imagine where we had got to; and on hearing some footsteps approaching (at 4 a.m) I stepped out to ask where we were There were two men and some donkeys passing. I had hardly said "Good morning" to them, when they gave a shout and bolted, taking me, I suppose, for a jin In another hour it was light enough to see our way, and we got our horses out and led them down the steep place that had puzzled us in the darkness After about an hour's ride the country appeared to become familiar to us, and a few minutes after we stood in front of the temple of Fukrah In some extraordinary manner, we had come back right behind Afka, and were now five or six hours to the south of it But we had not come by the lower road, but behind the village to east, and close to the edge of the frightful precipices which tower round it. How we managed it I cannot tell But it is quite apparent that if the line we had taken had been 10° more towards the west, we must have come right upon these places, and have come to grief As it was, I believe we had once or twice been close to the edge We now pushed on to Mezrâ'a Kefr Debien, and put up at a sort of general shop of a Maronite We had had no food for eighteen hours, but this did not hurry the good man of the house, who kept us waiting an hour while he told our story to his friends. We now tried to get a message sent to Antone, but there is a deal of humbug about the best of these people, and our friend of the shop unkindly upset our arrangements just as the messenger was going off, and eventually the message, I believe, never got off at all After another half hour we started for Dog River, and arrived there at 3 p.m., and got to Aitat some time after dark, after a tramp of about thirty-six hours Antone, not seeing anything of us at Afka, thought we must have gone on to the cedars, and followed us, as he thought He did not get back till four days after us

'Antone gave a curious answer one morning when reproved for giving stale eggs, the ends of which were hollow "The hens are very thirsty here, they don't get enough to drink, and so cannot fill their eggs"

'It was extremely fortunate that while we were wandering above Afka the sky was clear If it had been cloudy, we could not have walked in one direction, or have seen the dangerous places, and, as the country at this time of year is not inhabited for miles round, we were not likely to have met anybody to put us right

'It being considered desirable that I should pay the Governor-General, Reshid Pacha, a visit at Damascus, I went there from Beyrout, and was introduced to him by Mr Wood, the Acting-Consul He expressed great interest in our work, and said he would write to the new Pasha at Jerusalem on the subject He also said he was anxious to get a copy of my reconnaissance of the country east of the Jordan, and offered to guarantee my safety there if I would extend the survey north and south, and he would provide an escort at the Government expense He gave us authority to move the inscribed stone from the summit of Mount Hermon

'The south-west angle of the mosque at the outside struck me very much (See Photograph No 13) You have first a wall with pilasters at intervals (as at Hebron), the imposts having Egyptian mouldings Above this, a course of stones and a Corinthian looking cornice, and then a wall, apparently Roman, with masons' marks on the stones The wall with the pilasters extends to north as far as the buildings will allow of its being seen, to east it extends perhaps 80 feet (not measured), then a straight joint, and the line is continued by another wall, the lower part of which appears to be of a Roman temple and the upper part early Christian with arched windows, perhaps the Basilica of Arcadius On the stones of these arches are masons' marks, and on the stones of the wall at the south-west angle, *above* the cornice, are masons' marks (See Photograph No 13)

'On the stones below the cornice and between the pilasters I could see no marks

'Both the architecture and the masons' marks give us three epochs in these walls

'Supposing, then, the present Haram to have been a Christian Basilica of end of fourth century (see Robinson, p 462), built on the remains of a temple of Juno of second to third century, we have still the portion of wall below the cornice at south west angle to account for, and it may be either Ptolemaic, or even part of the earlier "house of Rimmon"

'As the Ptolemies put the Egyptian mouldings on their temples of Dendera and others, so also they may have brought the same mouldings to Damascus But, on the other hand, we have Mr Fergusson's authority (Arch, p 168) for a very similar moulding being also Assyrian, and the system of pilasters along the wall appears also essentially Assyrian (see Ferg Arch, plates 46 and 69)

'The pilasters at Damascus project about 5 inches, are 5 feet wide, and about 15 feet apart The wall between appears to have been plastered, and perhaps also the pilasters

'I cannot find that this portion of the wall has been spoken of before. I am aware, however, that one gentleman (an eminent architect) has seen these mouldings, and considers them to be of a late date (See Tracing XIV)

'The finding of incised masons' marks of different styles on many buildings in Syria has led me to think that they might be instrumental to a certain extent in giving an approximate date to the time when the stones were first cut Thus we have already seen that in the Damascus mosque the marks are different on the pieces of masonry of different periods We find this to be the case also at Burkush, where the old work has certain marks, while what appears to be Christian has a totally different mark At Banias there are marks At

Kulat ash Shukîf, on the chapel, on the bed of a stone, there is a mark, and at Afka, on the old wall, there are on three stones the same letter

'The walls at Baalbec are covered with characters, some of them Arabic, others Hebrew (?), and some appear to be Phœnician I have got squeezes of the latter, but not very clear ones We have already noticed the Phœnician characters on the stones of Saida, and those on the Haram wall of Jerusalem

'Perhaps something might be made out of the letters themselves, supposing they may refer to the name of the workman or of the architect, as we find at certain places certain letters prevail, and it is not every stone that is marked

'Thus, at Afka, the three marks are on stones separated by one or two others, and at Burkush there are a great number of Δ's, but not all close together.

'As an example, the H on two stones at Jerusalem might be supposed to stand for Herod or Hiram

'On the hill side to north-east of city, near Jebb Kasyûn, I found a great many nodules sticking in the limestone rock I have kept some of them, they appear to be coprolites

'On my return to Beyrout, I found the sledge ready which I had ordered for transporting the stone down the side of Hermon, provided, also, with a truck, handspikes, etc, we started 27th October It was late in the day, and we could not get farther than the 39th kilometre at about 4,000 feet Here we slept in the open, and, luckily, the wind was not very cold Our cook had disappeared during the darkness, and we did not discover him till early next morning, at Kubb Elias, where he had hurried on to get us some food The idea of telling us where he was going to had never entered his head, although there was no occasion for us to have passed Kubb Elias at all This village has a most voluminous spring of pure water The ruined castle, perched upon a little hill, appears from below to be quite a modern building To the south of the village, on the face of a steep rock, is a very conspicuous tomb, cut out (For sketch, see Tracing XIV) I could not ascertain whether it gives its name to the village, or whether it had anything to do with the prophet. We now started right across the plain to the opening east of Jubb Jenin For the first mile or two the country was alive with people, Bedouins and villagers, cutting and carrying the Indian corn At 2 p m we arrived at the gorge opening into Wâdy et Teim Here, to the right, is a small necropolis, the tombs being all rock-cut One of them (see Tracing XIV) has a triangle in red paint over the door, and red paint marks on each side

'By sunset we arrived at Rashaiya, where I met Captain Burton, from Damascus Next morning, before daylight, we ascended the mountain together, and arrived at the summit about 9 a m The sledge was got up soon after, with a set of twelve men from the village to draw it

'The stone was in a hollow at west end, and would have travelled in time towards Hasbaiya, it weighed about 18 cwt We put it into the truck, and got it pretty easily over the first portion, which was down hill, but when it came to getting it up to the crest to east, the men could not drag it In cutting some projecting pieces off the rear, it broke nearly in two, and now we were able to get them along with some trouble to the brow of the mountain The pieces were now put on the sledge, with men in front to drag and behind to check, but the machine was too lively When started it went off at twenty miles an hour, and the men had no notion of checking it The first time it bounded down some 300 feet, and then turned over We got it in hand again, but the men were in no order, and after its just shaving a man's leg, I thought it better to try only one piece of the stone It was of no

use the men were like so many children, quite incapable of working together, and so the stones were carefully covered up in the shingle, and left Had we had our workmen from Jerusalem, we should have had little difficulty in the matter

'We arrived at Rashaiya after dark, and arranged with a man that he should bring the pieces of the stone on mules to Beyrout by the next Saturday At 2 a m, Corporal M'Kenzie and I started for Beyrout, without any guide It was nearly pitch dark, and we lost our way After plunging through wadies and over hills, we at last found ourselves over at Raffêd, and before daybreak we had got into the Bukâ'a, and, pushing on, got into Beyrout that night

'There now remained a temple near Antûra, which Mr Fraser had discovered, and which I was anxious to see

'It is about seven or eight hours from Beyrout, near Antûra We stopped a night halfway at the house of an hospitable French silk manufacturer, and next morning went on to see this temple It is in the last stage of decay, 53 feet by 33 feet, on a stylobate There are five courses in the wall, and one is 6 feet high, one stone weighing ten tons Stone on edge, 6 feet high, 2 feet 1 inch wide, and 10 feet long Entrance was towards the east'—Captain Warren, 'Quarterly Statement,' 1869, pp 215—242

SUMMIT OF HERMON

'HERMON, a portion of the anti Lebanon range, stretches from north-east to south-west for over 30 miles

'The culminating point is about equi distant from either end, and is about 9,000 feet above mean sea-level of the Mediterranean This height was obtained 14th September, 1869, with Aneroid No 1837 (Negretti and Zambra) This is also the height as estimated by Lynch and Russegger, but latterly 10,000 feet has been assumed as the real height

'At the top is a plateau, comparatively level, here are two small peaks lying north and south, and about 400 yards from each other, situated to the west, and separated by a ravine, at a distance of 600 yards, is a third peak, the tops of these three are in altitude within a few feet of each other, and together they form the summit of Hermon

'The plateau at top is of an irregular shape, and measures about 500 yards in diameter at its north-eastern end the ridgebone of Hermon runs down to a sharp ledge, on which you can sit and look north and south This ridge gradually falls to the north east, until Hermon becomes lost in the minor hills of the anti-Lebanon The western peak is separated from the plateau by a ravine of about 100 feet deep, with gently sloping sides from this peak the ridgebone runs away to south west at an angle of 210° with the magnetic meridian It appears to fall for about 1½ miles, and then to rise again in a second culminating point, and after that to spread out into spurs, this second point appears to be lower than what is generally known as the summit

'On the northern and western peaks no ruins could be found, or any sign that they had been used as places of worship, but on the southern peak there is a hole scooped out of the apex, the foot is surrounded by an oval of hewn stones, and at its southern end is a Sacellum, or

temple, nearly destroyed the latter appears to be of more recent date than the stone oval, and the mouldings on its cornice appear to be Roman

'The oval is formed of well-dressed stones, from 2 to 8 feet in length, 2½ feet in breadth, and 2 feet thick, they are laid in a curved line on the uneven ground, their breadth being their height, and their ends touching each other. In some places it almost appears as though there had been two courses of these stones one on the other, many of them are still *in situ*, while others are only just overturned, but in some places to the west the stones have been completely removed, and the position they occupied can only be ascertained by the cutting in the rock made to receive them

'These stones follow the inequalities of the ground, where it is shingle they are let in 2 or 3 inches, where it is rock there is just a level place cut down to receive them In one place, where the rock forms a small natural scarp of 4 or 5 feet, the stones appear to have broken their continuity and to have been laid at different levels On the south-eastern side the stones are lying about, but no trace could be found of the site they occupied The oval appears to have been something of an ellipse, its longer axis from north-west to south east being 130 feet, its shorter axis being about 100 feet within, the peak rises for about 18 feet, and at the apex is a hole cut out like a cauldron, 9 feet in diameter and about 6 feet deep, at the bottom is shingle and rubbish, and the true bottom is probably deeper The rock is cut and scarped in several places To the south, and just outside the oval, is the ruin of a rectangular building, whose entrance was to east, the angle of the side is 72°, it is 36 feet 3 inches long, and 33 feet 3 inches broad, the shorter sides being to east and west The rock is cut down to receive it, at the north-east angle the rock has been scarped down so as to leave a passage 2 feet wide between it and the building at the north west angle and west side the rock has been cut down to afford room for the building, and part of the lower portion of the wall appears to be cut out of the rock On the south side the rock falls away from the building; the walls are about 2 feet 6 inches thick In some places two courses still remain, but at the north-east angle and in other parts the wall has quite disappeared At the south-east angle the foundations appear to be produced for 2 feet beyond the walls On the accompanying tracing the joints of the stones are shown, they (the stones) are of no great size, generally from 3 to 4 feet long, and extending through the wall On some of the stones a faint marginal draft is seen, but most of the stones are simply well squared ashlar The ruins of the temple, for the most part, lie down the hill to the south east, a diligent search was made among these for any signs of mouldings, etc, but nothing could be seen but a piece of cut stone with a circle engraved, and pieces of the cornice, of the cornice there are a great number of pieces, and as there does not appear to be any reason why so much of this should remain and yet other mouldings get lost, it seems reasonable to suppose that this was the only ornament, and that the building was simply a *sacellum*, that is, a rectangular building without a roof.

'It is possible that there may have been columns at the entrance, which, if thrown down with the other *debris*, would most certainly have rolled down the gulley below for at least 2,000 feet, but we could find no remains of columns either in the gulley or at the bottom of it However, Dr Porter ("Murray's Handbook," p 430) mentions having seen a fragment of a column to north of ruins, and we found two columns at the entrance to a cavern to north-east, which may have belonged to the *sacellum* This cavern is hewn in the rock, and has its entrance to the east, it is irregular in shape, about 30 feet in diameter, and is about 6 to 8 feet in height, at the south-west end there is a rock-cut column to support

the roof, at the entrance are the frusta of two columns, about 19 inches in diameter, a sloping ascent leads up to the surface, above is a level platform, sides 30 feet by 26 feet, south-western end cut out of the rock

'The stone composing the oval and the building are of the same limestone as the mountain itself.

'To the north-west of the oval we found a stone 4 feet by 18 inches by 12 inches, with a Greek inscription on the face very roughly cut, a squeeze was taken of this, and a *fac-simile* from it has been attempted, it is enclosed This inscription does not appear to have been noticed by travellers before

'The top of the mountain, when the rock does not crop out, is covered with a small shingle, possibly caused by the disintegrating influence of the frequent frosts and thaws on the summit, on the western slopes the same shingle is found, lying at an angle of 25° to 30°, so that it is just possible for a man to walk straight up the last 1,000 feet, on the eastern side the rock is harder, and the shingle is only found in the narrow gulleys, the slope is also very steep, 45° and more, so that the stones and shingle must be continually on the move

'In the winter time the snow appears to extend down the mountain side for about 5,000 feet, it gradually melts away as the spring advances, until in September very little is left, and this only in the crevices where the sun is unable to penetrate In November the snow begins to cover the mountain again

'It is to be observed that the southern peak, where is the stone oval, cannot be seen from any point below except to the east, and the summit generally cannot be seen from the villages at the base of the mountain From many of the villages there is a culminating point seen, but it is the side of the mountain, and not the true summit

'To the south of the summit is a deep indentation in the mountain, forming a broad valley, perhaps 4 miles wide, here the waters of the Awaj rise and flow towards Damascus The existing maps do not give a very correct idea of the features of the country here, or of the positions of the villages, but without a triangulation I doubt if any great improvement on them could be effected

'The village temples about Mount Hermon are, strictly speaking, the temples of Wady et Teim, as several of them, Thelthatha, and others, cannot be said in any way to be on the sides of the mountain It has been previously stated that the manner in which Wâdy et Teim is closed up by narrow gorges at either end may account for the existence of these temples, while others in the great plain have been destroyed

'The *sacellum* on the summit has nothing in common in its construction with the temples on the west below, and it may have had to do with quite a different form of worship

'Hermon, no doubt, as being pre-eminent among the high places of Syria and Palestine, must have been the scene of the ancient worship its stone oval may have been for the same purpose as that of the kaaba at Mecca

'Burckhardt (p 172, vol 1) tells us "The devotee then begins the *towaf*, or walk round the kaaba, keeping that building on his left hand."

'Page 173 "The *towaf* is a Mussulman ceremony, not exclusively practised in the temple at Mecca In the summer of 1813 I was present at the annual festival of the patron saint at Kinne, in Upper Egypt, called Seid Abderrahman et Keunawy Each person, as he arrived, walked seven times round the small mosque which contains the tomb"

'Page 177 "Prior to the age of Mahomet, when idolatry prevailed in Arabia, the kaaba was regarded as a sacred object, and visited with religious veneration by persons who performed the *towaf* nearly in the same manner as their descendants do at present"

'It appears possible that Hermon may be one of the holy mountains spoken of in the Mohammedan mythology Burckhardt tells us (vol 1, p 297), with reference to Adam building the kaaba, that he "collected the stones for the building from the five holy mountains —Lebanon, Tor Syna (Mount Sinai), El Djondy, Hirra, or Djibel Nour, and Tor Zeyt" The sheikh of the Mosque at Jerusalem tells me that Tor Zeyt is the Mount of Olives, considered holy by them because Isa ascended from it, if this is the case, then this myth would be of later origin than the Christian era Perhaps by Lebanon, Mount Hermon is intended, and the stone oval may have some connection with the *towaf* of the kaaba

'Of the five holy mountains, we have those on which the ark rested, the law was given, and from which Isa ascended this disposed of three, the fourth, Hura, or Gibl Nour, at Mecca, the scene of some local tradition, and the fifth, Lebanon How comes the latter to be classed among the five, unless it is on account of its connection with some pagan tradition?

'The only temple which appears to have any connection with the summit of Hermon is one immediately below, at the bottom of a gulley, here there are the remains of enormous blocks of stone, and the building appears to have also been a *sacellum*, it is, I believe, at present quite unknown, and was, I understand, discovered by the Rev — White a few months ago I heard of it from the schoolmaster at Rashaiya There were no springs to be seen near the summit of Hermon, but the muleteers said that about 2,000 feet down there is a spring of brackish water, at any rate, they took their animals somewhere to get water, and were only a short time absent from the summit'—'Quarterly Statement,' 1869, pp 210—215

ON THE POTTERY AND GLASS FOUND IN THE EXCAVATIONS

BY GREVILLE CHESTER

(FROM THE 'RECOVERY OF JERUSALEM')

'ALTHOUGH large quantities of pottery have been found in the various excavations carried on by the Palestine Exploration Fund, few objects of very high antiquity, and scarcely any of fine art, have been discovered The shafts and galleries having been mostly sunk in masses of *debris* and in 'made ground,' the fictile objects are generally in a fragmentary state, the few exceptions to this rule being those disinterred from passages and tombs Many of the fragments, moreover, are of such a rude and common description, that it is difficult to fix correctly the date of their manufacture, and this the more so, since the commonest ware of different nations is precisely that which possesses the least distinctive characteristics It is the object of this paper to describe some of the more interesting specimens, and to assign them, as nearly as may be, to the period and country to which they belong

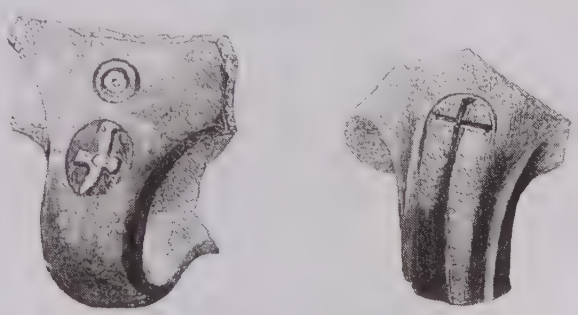
'And here, at starting, it must be confessed that no specimen found as yet can be pronounced to be from the workshop of a Jewish handicraftsman Most of the earlier specimens

were probably imported from the opposite shores of the Greek islands, and in some few instances from Italy: a few Phœnician vase-handles and the Christian objects alone possessing sufficient individuality to justify their assignment to manufactures within the limits of the Holy Land.

'The pottery found in the excavations may conveniently be considered in the following order:

I. Phœnician pottery.
II. Græco-Phœnician pottery, *i.e.*, pottery made in Cyprus and elsewhere, where there were Phœnician colonies influenced by Greek culture.
III. Pottery of Roman manufacture.
IV. Christian pottery.
V. Arabic pottery.

'I. *Phœnician Pottery.*—The very interesting specimens which may safely be referred to this head are six vase-handles, found by Captain Warren on a bed of rich earth, from 8 to



ANCIENT MARKS ON HANDLES OF VASES.

10 feet in thickness, lying on the rock at the south-eastern angle of the Haram enclosure, at the depth of 79 feet from the present surface. Each of these handles bears impressed upon it a more or less well-defined figure, resembling in some degree a bird, but believed to represent a winged sun or disc, probably the emblem of the Sun God, and possibly of royal power. On each handle Phœnician letters appear above and below the wings; and these, in two instances, have been interpreted by Dr. S. Birch, of the British Museum, and imply that the vessels were made for the royal use, or at all events in a royally privileged manufactory.

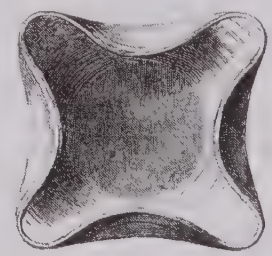
'A. [See fig.] LeMeLeK. ZePHa.—To or of King Zepha.
'B. ——————— LeK SHaT.—King Shat.
'C. ——————— LeK.—The letters which follow are uncertain.
'D, E, F. The letters are nearly obliterated on these examples.

'Another vase-handle, found in the same place, and apparently of the same ware, bears as a potter's mark a cross within a semicircular mark. This cross, it is needless to remark, has no relation to the sign of salvation.

'When the rarity of Phœnician inscriptions of any kind is taken into consideration, the importance of these fragments, which are probably as old as the Moabite Stone, will become

apparent, and the practical importance of collecting and preserving even the smallest pieces of pottery is proved. The letters were not discovered until the handles were cleaned, after their transmission to England. It may be hoped that future discoveries may add to our knowledge of the royal personages now for the first time indicated, and that the researches of the Association may be hereafter rewarded by the finding of a fragment of the work of the royal establishment of potters mentioned in 1 Chron. iv. 23 as existing at Jerusalem.

'II. *Græco-Phœnician Pottery.—In* the bed of solid earth *upon* which the Phœnician



vase-handles were found, several broken lamps occurred. These are of red or brownish ware, with one, two, or three lips, and seem adapted for the burning of fat rather than oil. A specimen of the same period, remarkable as having *four* lips, and in perfect preservation, was found in a cave upon Olivet. Lamps of the same design with the former of these have been found in considerable numbers in the island of Cyprus (Chittim), and also in the semi-Phœnician tombs in the rocks of Ben Gemmi, in Malta. They are considered by Mr. A. W. Franks to be of late date—not earlier, *i.e.*, than the second century before the Christian era.

ANCIENT DISH.

The position of the broken lamps and other pottery found with them may be accounted for by the supposition that they were thrown down upon the surface of the solid earth, and afterwards trodden in before the accumulation of the superincumbent mass of *débris*, or they may have been deposited with the earth itself. Underneath this earth, and at the depth of 83 feet from the surface, Captain Warren discovered a small vase (see fig.), placed in a cavity scooped out of the rock, at 3 feet from the angle of the Haram wall. This vase is of pale red ware, and of a common Græco-Phœnician type.* The fact that the inscribed Phœnician

* See 'Quarterly Statement,' 1869, No. I., p. 85.

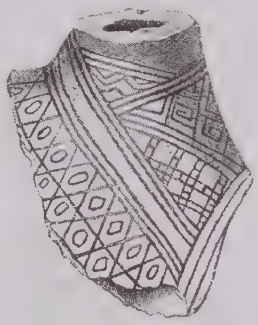
vase-handles were found *above* the last named lamps and pottery does not militate against the period to which the latter have been attributed, for they may have been found in some ancient excavation within the wall, and thrown over it *after* the deposition of the solid earth, and *before* that of the looser soil which lies above it. A considerable number of vases, dishes, and pateras have also been found in various other excavations, and notably in caves about Olivet. Many of these vessels are of exactly the same type as those found in the tombs of Ben Gemmi. They had all, probably, a common place of manufacture in Cyprus or some other of the Greek islands, which, especially Rhodes, are known to have imported largely to Alexandria. In this last city vase-handles are constantly found bearing the Rose of Rhodes and the names of the Greek potters who made them. One fragment alone bearing a pure Greek inscription was found on Ophel. A dish of brown ware, measuring 10 inches in diameter, and found in a cave near Olivet, is remarkable for having its feet perforated like handles, as if for the purpose of suspension when the utensil is not in use.

'Two circular discs, each pierced with two holes, and an oblong object, resembling an

unengraved stamp, found at Saida, probably belong to this period. Some suppose these objects were used as weights for looms.

'Of a different character from the above are a few specimens, less than a score in number, which may be safely asserted to be of the Græco Phœnician fabric of Cyprus. These are of yellowish colour, profusely ornamented with bands and interlaced patterns of dark red. The designs strongly resemble those seen on the pottery of the aboriginal Kabyle Mountaineers of Algeria, and on that of the almost unknown Rif people of the empire of Marocco. The largest specimen is a portion of a large single handled jar, and, from the perforated stoppage in the interior of the neck, like that of an Egyptian "Gulleh," was probably used for water. It was found at the depth of 19 feet in the Muristân, and is here figured in conjunction with a smaller fragment from the same spot. (See fig.) Large quantities of precisely similar pottery have been found from time to time in Cyprus, and a fine collection has recently been added to the Royal Museum at Turin. Specimens also exist in the British Museum and in the Louvre.

Excavations at the Birket Israil, the Muristân, and on Ophel, have produced six fragments of vases, which, with a perfect specimen obtained by Captain Warren from the French Consul at Saida (Sidon), are among the most curious objects in the possession of the Association. They are here described with very great hesitation as belonging to this division, and considerable doubt exists as to their proper appropriation. Several precisely similar vases



exist in the Egyptian collection in the British Museum, one of which was presented by Sir Gardner Wilkinson; but in no instance is the locality of their discovery stated in the "Register." Two are figured in the "Antiquités d'Egypte," vol. v., plate 76, Nos. 8 and 16; but here again, strangely enough, though engraved along with specimens of vases from Thebes and Sakkâra, they are simply described as "other vases." These curious vessels are all of an extremely hard, massive black ware, coated in three instances with a dark crimson

VASE FOUND AT BIRKET ISRAIL.

glaze, perhaps produced by cinnabar. Five out of the seven specimens, including the perfect one, are in the shape of the Thyrsus, or pine-cone, so often represented on ancient monuments and gems as the symbol of Dionysus.* The neck, in the two instances where it is

* The cone, if such it be, is in each case *fluted*, and may, therefore, represent some other seed or fruit. Three of the British Museum specimens are likewise fluted.

preserved, is short, and the orifice extremely small. The apex of the cone being downwards, it is evident that these vases were not intended to stand upright. (See fig.) It was difficult to assign a use to these singular vessels; but the problem has apparently been solved in the following manner: The writer passed a bent quill down the narrow neck, and scraped the inner surface of the perfect vase. By this means pieces were detached of a grey substance, which, on being analyzed by Professor N. Maskelyn, proved to be small flakes of decomposed bees'-wax, and amongst these appeared several small globules of quicksilver in its usual state. It therefore seems almost certain that these vases were designed for the importation or preservation of quicksilver, a use to which their massiveness, weight, and the narrowness of the neck, which would insure easy stopping, would render them peculiarly appropriate. The bees'-wax was doubtless used for closing the orifice.

'III. *Roman Pottery.*—Considering the great abundance of Roman ware which is commonly found in places of Roman occupation, it is singular that very few specimens have been found in the excavations. A fragment of the so-called "Samian" ware was discovered near Wilson's Arch, in a passage leading south; another came from Ophel, at the distance of 52 feet from the surface, and a third was found elsewhere. This last piece has an interesting potter's mark impressed upon the bottom inside: it is in the shape of a foot, with distinctly marked and elongated toes, and the letters CANRI.* (See fig.) To the Roman period, also, belong three or four lamps of late date and poor design; a jar covered with circular horizontal flutings of a type common in Egypt, where it was perhaps made; some earthenware water-pipes from the so-called "Bath of Helena," east of Olivet; and the fragments of a large amphora of pale red ware, stamped with a curious potter's mark. This reads BARNAE, and implies that it was the work or from the shop of Barna or Barnas, a very peculiar and unusual name, and one probably of Jewish origin. The two syllables of the name are arranged above and below a monogram. (See fig.) This amphora seems to be of late work; it was found

by Captain Warren 8 feet deep in the mound at Wâdy Kelt, near Jericho. A small vase with a single handle covered with a shining brown glaze is also probably Roman; it was found near Saida.

'III. *Christian Pottery.*—Of pottery which can unhesitatingly be assigned to the Christian period the Association possesses a large series of lamps. Some of these are distinguished by extremely curious inscriptions, and most of them possess a local character which is extremely interesting. Many lamp-types of mote Western Christendom, from the Catacombs of Rome,

* Mr. W. Chaffers, in his 'Marks and Monograms on Pottery and Porcelain,' p. 13, figures a very similar mark, and ascribes this ware to Aretium (Arezzo).

Syracuse, and Carthage, such as the Good Shepherd, the Sacred Monogram ☧, the Dove, the Cock of St. Peter, and the Chalice, are entirely absent; and the same may be said of the disgusting and probably Gnostic device of the Toad associated with the Cross, so often found in the Catacombs of Alexandria and elsewhere in Egypt. The earthenware bottles with the effigy of St. Menas, an Egyptian saint who flourished in the fourth century, and whose name recalls the first Egyptian king, so commonly found with Christian lamps in Egypt, are also absent. The usual symbols of the Jerusalem lamps, which are all of a rude and cheap description, and which give an affecting indication of the poverty of the "saints" of the early Church of Jerusalem, are the Cross, the very Sign of their Salvation; the Seven-branched

Candlestick, which reminded them not only of the dimmed glories of Zion, but of Him who is the Light of the World; and the Palm Branch, which was dear to them not merely for its own exquisite grace and beauty, but by its association with Psalm xcii., with the Gospel narrative, John xii. 13, and with the Apocalyptic Vision, wherein the glorified saints are described as "clothed with white robes and palm branches in their hands" (Rev. vii. 9). These emblems, which the Christians of the "Mother of Churches" used and rejoiced in, in common with their brethren in more Western lands, are all more or less conventionalized in their treatment, and are represented in a distinctive and different manner, occurring in every instance, not, as is usual in the West and even in Egypt, in the *centre*, but along the edge and

near the outer lips of the lamps, which are pear-shaped, and in no instance round. *Un*-inscribed round lamps of a different description have, nevertheless, been discovered, and probably belong to this period. (See fig.)

'The following inscriptions occur; they are written in barbarous Greek, the words being often misspelt, and the letters frequently braced together or turned upside down. It is noticeable that one form of the Λ which is used, is that which is constantly found upon contemporary work in Egypt, and indeed is frequently employed as a potter's mark for ware made at Alexandria, which seems to have been to Egypt what Stoke and Worcester are to England, and Dresden to Germany.

'1. LVXNΛRIA KALΛ. *A Seven-branched Candlestick, conventionalized.* The first word is not classical Greek, but the inscription seems to signify "Good," or "Beautiful Lamps."

LAMP.—POOL OF BETHESDA.

'2. ΦωC XV ΦЄNIΠACIN. *A Cross.* This misspelt inscription may be translated, "The Light of Christ shines forth," or "gives light to all." (See fig.)*

'3. ΦωC XV ΦЄNΠΔCIN, followed by two letters whose meaning has not been explained. *A conventionalized Seven-branched Candlestick.* There are several specimens of this type.

'4. The inscription on this lamp appears to begin with the letters IXΘ, which may stand for Ιησους Χριστος Θεος, or it may possibly allude to our Lord under the well-known symbol of the fish, IXΘVS, the letters of which form the initials of the Greek equivalent to "Jesus Christ, the Son of God, the Saviour."

'Some other lamps have a running pattern of the conventionalized tendrils, leaves, and fruit of the vine, executed with considerable freedom and elegance; but although they exhibit something of Greek freedom of treatment, they may probably be assigned to the Christian period, and the design may have reference to the mystery of the Holy Eucharist. (See fig.) One of the Jerusalem lamps bears the letters I+I, probably for Jesus; and another of some

* Compare a lamp in the Museum at Leyden, which bears the inscription ΦωC ЄΞ ΦωTOS, *Light of Light.*

what different fabric, besides two palm branches, exhibits a tree within a circular fence. It may be conjectured that this is intended to represent the Tree of Life. The writer has seen a somewhat similar tree in a mediæval Hebrew map of the Holy Land. The Christian lamps have been found not only in tombs, but in numerous other excavations in and about Jerusalem. It is remarkable that none of them bear potters' marks on the under side.

'V. *Arabic Pottery.*—Of Arabic pottery scarcely anything of importance has been discovered. Among the specimens are two or three pots covered with a green glaze, and numerous fragments of utensils for domestic use. Perhaps the most interesting object under this head is a small lamp found in an excavation at the Muristân, at a depth of 12 feet. It is coloured white, barred with blue and black lines. Though the ancient classical form—which indeed still lingers in the south of Europe, in the East, and, it is said, even in Germany—has to some extent been preserved in this specimen, it may nevertheless be considered a work of Arab art, as the texture, glaze, and patterns are precisely like those on pieces of undoubted Arabic pottery found by the writer upon the mounds of Musr Ateeken, or Old Cairo, the ancient Fostat of the Arabian conquerors of Egypt. A few morsels of Cufic inscriptions on green

and yellow ware have been found at Birket Israil and at Ain es Sultan, from which also was obtained a fragment of a blue and white dish representing two birds amongst foliage.* It should be mentioned here that the Society possesses a few specimens of Arabic wall-tiles, one of which, with a characteristic blue pattern on a pale green ground, is from the Great Mosque at Damascus, formerly the Church of St. John Baptist.

'*Glass.*—Besides pottery, great quantities of fragments of ancient glass have turned up in the various excavations. Most of these, although extremely beautiful from their iridescent colours—the result of decomposition—are of little or no importance. Not even a single portion of such beautiful bottles of opaque and wavy glass as those yielded by the tombs of Saida and its neighbourhood, and only two variegated beads, such as those which may still be obtained from the peasant lads of Tyre, have as yet been discovered. One vase, however,

* This is but one out of many proofs that Mahommedans are by no means so consistent in rejecting forms of animal life as is vulgarly supposed.

found with Greco-Phœnician pottery in a sepulchral cave on Olivet, merits attention from its rare and peculiar form It is *double*, with two handles, and a third, now unfortunately broken, originally arched over the top The colour is a pale green, with circular and zig-zag lines running over it in relief, of a much darker tint, approaching to blue (See fig) To the Roman period belong several fragments of glass mosaic of the ordinary type, which have been found in various parts of the excavations Of Arabic glass three lamps are worthy of especial notice Two of these are of a pale green colour, with three dark blue rings or handles, by which they were formerly suspended by means of chains, and perforated stems designed apparently to hold a wick

'These lamps may be advantageously compared with the more magnificent and inscribed specimens brought from Cairo, and now in the Slade Collection in the British Museum, and with those purchased by the nation from Dr. Meymar, and now at South Kensington A very few of like form may yet be seen in some of the oldest Coptic Dayrs, or convents, and in the mosques in the neighbourhood and city of Cairo The present specimens were found by Captain Warren in a rock-cut and vaulted chamber in a passage leading down to the Fountain of the Virgin The third specimen is of smaller size, it is likewi of a pale green tint, the three handles being of the same colour, and, like the other examples, contains a central stem for the wick'

THE END

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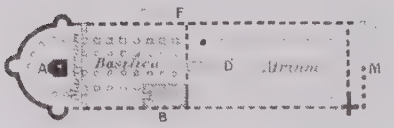
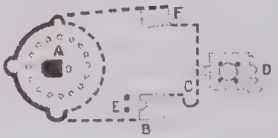
CHURCH OF HOLY SEPULCHRE.

I. CONSTANTINE 335 A.D.

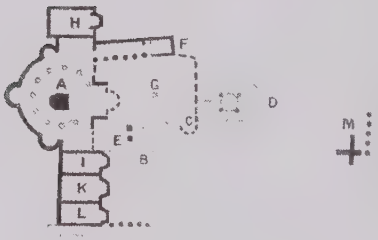


II. MODESTUS 616

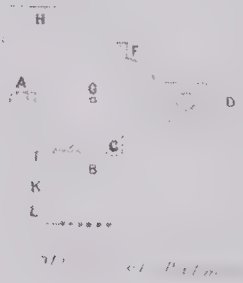


Existing Remains
Restoration
Ex Pal Buildings

III. NICEPHORUS 1048 A.D.

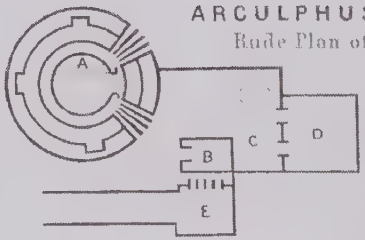


IV. BALDWIN 1103



A. *Sepulchrum Domini*
B. *Golgotheum Ecclesia*
C. *In loco Altaris Abrahæ*
D. *Inventio Crucis*
E. *Sancta Maria*
F. *Carcer Christi*
G. *Compas*
H. *Apparitio*
I. *S. Johannes*
K. *S. Trinitas*
L. *S. Jacobus*
M. *Propylea*

ARCULPHUS 680
Rude Plan of N° 2.



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